



P11073us seq list.ST25.txt

SEQUENCE LISTING

<110> Lorantis Ltd.

<120> Modulations of Notch signalling for use in Immunotherapy

<130> P011073US CLM

<140> 10/764,415

<141> 2004-07-23

<150> GB0118153.6

<151> 2001-07-01

<150> GB0207930.9

<151> 2002-04-05

<150> GB0212283.6

<151> 2002-05-28

<150> GB0212282.8

<151> 2002-05-28

<160> 40

<170> PatentIn version 3.0

<210> 1

<211> 43

<212> PRT

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Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Cys	Xaa	Xaa
1				5						10					15	

Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
			20							25					30	

Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys
		35						40			

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<222> (16)..(16)

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Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Cys Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys
 35 40

<210> 3

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<222> (7)..(9)

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<222> (11)..(13)

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<222> (18)..(18)

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<222> (20)..(20)

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<222> (24)..(25)

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<222> (27)..(29)

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<222> (31)..(33)

<223> X is any amino acid residue

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<222> (35)..(36)

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<222> (40)..(42)

<223> X is any amino acid residue

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Cys Xaa Xaa Xaa Tyr Tyr Xaa Xaa Xaa Cys Xaa Xaa Xaa Cys Arg Pro
1 5 10 15

P11073us seq list.ST25.txt

Arg Xaa Asp Xaa Phe Gly His Xaa Xaa Cys Xaa Xaa Xaa Gly Xaa Xaa
 20 25 30

Xaa Cys Xaa Xaa Gly Trp Xaa Gly Xaa Xaa Cys
 35 40

<210> 4

<211> 18

<212> PRT

<213> artificial sequence

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<223> X is 1 to 4 amino acids

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<222> (3)..(3)

<223> X is 0 to 48 amino acids

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<221> MISC_FEATURE

<222> (5)..(5)

<223> X is 3 to 12 amino acids

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<221> MISC_FEATURE

<222> (7)..(7)

<223> X is 1 to 70 amino acids

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<221> MISC_FEATURE

<222> (9)..(9)

<223> X is 1 to 6 amino acids

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<221> MISC_FEATURE

<222> (11)..(11)

<223> X is 2 amino acids

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<221> MISC_FEATURE

<222> (14)..(14)

<223> X is 0 to 21 amino acids

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<222> (16)..(16)

<223> X is 2 amino acids

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<221> MISC_FEATURE

<222> (18)..(18)

<223> X is any amino acid

<400> 4

Xaa	Cys	Xaa	Cys	Xaa	Cys	Xaa	Cys	Xaa	Cys	Xaa	Gly	Ala	Xaa	Gly	Xaa
1			5					10						15	

Cys Xaa

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<211> 20

<212> DNA

<213> Artificial sequence

<400> 5
gtaaccgcgtt gaacccatt

20

<210> 6

<211> 20

<212> DNA

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<400> 6

ccatccaatc ggtagtagcg

20

<210> 7

<211> 20

<212> DNA

<213> Artificial sequence

<400> 7

ggtgctgata acagcggaat

20

<210> 8

<211> 20

<212> DNA

<213> Artificial sequence

<400> 8

atttttggaa tccttcacgc

20

<210> 9

<211> 26

<212> DNA

<213> Artificial sequence

<400> 9

gatctggggg gctataaaaag ggggta

26

<210> 10

<211> 26

<212> DNA

<213> Artificial sequence

<400> 10

accccccgat attttccccc attcga

26

<210> 11

<211> 50

<212> DNA

<213> Artificial sequence

<400> 11

gatcccgact cgtgggaaaa tgggcggaag ggcaccgtgg gaaaatagta	50
<210> 12	
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ggctgagcac ccttttacct gccttcccggt ggcacccttt tatcatctag	50
<210> 13	
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caccccatgg ctacctgtca g	21
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ggctgcacct gctgggtctg c	21
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<211> 36	
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aaaggattca ccatggcacg caagcgccgg cgcagt	36
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gcgctcgagt tacttgaacg cctccgggat gcg

33

<210> 17

<211> 800

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<213> Artificial sequence

<400> 17

Met Ala Arg Lys Arg Arg Arg Gln His Gly Gln Leu Trp Phe Pro Glu
 1 5 10 15

Gly Phe Lys Val Ser Glu Ala Ser Lys Lys Lys Arg Arg Glu Pro Leu
 20 25 30

Gly Glu Asp Ser Val Gly Leu Lys Pro Leu Lys Asn Ala Ser Asp Gly
 35 40 45

Ala Leu Met Asp Asp Asn Gln Asn Glu Trp Gly Asp Glu Asp Leu Glu
 50 55 60

Thr Lys Lys Phe Arg Phe Glu Glu Pro Val Val Leu Pro Asp Leu Asp
 65 70 75 80

Asp Gln Thr Asp His Arg Gln Trp Thr Gln Gln His Leu Asp Ala Ala
 85 90 95

Asp Leu Arg Met Ser Ala Met Ala Pro Thr Pro Pro Gln Gly Glu Val
 100 105 110

Asp Ala Asp Cys Met Asp Val Asn Val Arg Gly Pro Asp Gly Phe Thr
 115 120 125

Pro Leu Met Ile Ala Ser Cys Ser Gly Gly Gly Leu Glu Thr Gly Asn
 130 135 140

Ser Glu Glu Glu Glu Asp Ala Pro Ala Val Ile Ser Asp Phe Ile Tyr
 145 150 155 160

Gln Gly Ala Ser Leu His Asn Gln Thr Asp Arg Thr Gly Glu Thr Ala
 165 170 175

Leu His Leu Ala Ala Arg Tyr Ser Arg Ser Asp Ala Ala Lys Arg Leu
 180 185 190

Leu Glu Ala Ser Ala Asp Ala Asn Ile Gln Asp Asn Met Gly Arg Thr
 195 200 205

Pro Leu His Ala Ala Val Ser Ala Asp Ala Gln Gly Val Phe Gln Ile
 210 215 220

Leu Ile Arg Asn Arg Ala Thr Asp Leu Asp Ala Arg Met His Asp Gly
 225 230 235 240

Thr Thr Pro Leu Ile Leu Ala Ala Arg Leu Ala Val Glu Gly Met Leu
 245 250 255

Glu Asp Leu Ile Asn Ser His Ala Asp Val Asn Ala Val Asp Asp Leu
 260 265 270

Gly Lys Ser Ala Leu His Trp Ala Ala Ala Val Asn Asn Val Asp Ala
 275 280 285

Ala Val Val Leu Leu Lys Asn Gly Ala Asn Lys Asp Met Gln Asn Asn

P11073us seq list.ST25.txt

290		295		300
Arg Glu Glu Thr Pro Leu Phe Leu Ala Ala Arg Glu Gly Ser Tyr Glu				
305		310		315 320
Thr Ala Lys Val Leu Leu Asp His Phe Ala Asn Arg Asp Ile Thr Asp				
	325		330	335
His Met Asp Arg Leu Pro Arg Asp Ile Ala Gln Glu Arg Met His His				
	340		345	350
Asp Ile Val Arg Leu Leu Asp Glu Tyr Asn Leu Val Arg Ser Pro Gln				
	355		360	365
Leu His Gly Ala Pro Leu Gly Gly Thr Pro Thr Leu Ser Pro Pro Leu				
	370		375	380
Cys Ser Pro Asn Gly Tyr Leu Gly Ser Leu Lys Pro Gly Val Gln Gly				
385		390		395 400
Lys Lys Val Arg Lys Pro Ser Ser Lys Gly Leu Ala Cys Gly Ser Lys				
	405		410	415
Glu Ala Lys Asp Leu Lys Ala Arg Arg Lys Lys Ser Gln Asp Gly Lys				
	420		425	430
Gly Cys Leu Leu Asp Ser Ser Gly Met Leu Ser Pro Val Asp Ser Leu				
	435		440	445
Glu Ser Pro His Gly Tyr Leu Ser Asp Val Ala Ser Pro Pro Leu Leu				
	450		455	460
Pro Ser Pro Phe Gln Gln Ser Pro Ser Val Pro Leu Asn His Leu Pro				
465		470		475 480
Gly Met Pro Asp Thr His Leu Gly Ile Gly His Leu Asn Val Ala Ala				
	485		490	495
Lys Pro Glu Met Ala Ala Leu Gly Gly Gly Gly Arg Leu Ala Phe Glu				
	500		505	510
Thr Gly Pro Pro Arg Leu Ser His Leu Pro Val Ala Ser Gly Thr Ser				
	515		520	525
Thr Val Leu Gly Ser Ser Ser Gly Gly Ala Leu Asn Phe Thr Val Gly				
	530		535	540
Gly Ser Thr Ser Leu Asn Gly Gln Cys Glu Trp Leu Ser Arg Leu Gln				
545		550		555 560
Ser Gly Met Val Pro Asn Gln Tyr Asn Pro Leu Arg Gly Ser Val Ala				
	565		570	575
Pro Gly Pro Leu Ser Thr Gln Ala Pro Ser Leu Gln His Gly Met Val				
	580		585	590
Gly Pro Leu His Ser Ser Leu Ala Ala Ser Ala Leu Ser Gln Met Met				
	595		600	605
Ser Tyr Gln Gly Leu Pro Ser Thr Arg Leu Ala Thr Gln Pro His Leu				
	610		615	620
Val Gln Thr Gln Gln Val Gln Pro Gln Asn Leu Gln Met Gln Gln Gln				
625		630		635 640
Asn Leu Gln Pro Ala Asn Ile Gln Gln Gln Gln Ser Leu Gln Pro Pro				
	645		650	655
Pro Pro Pro Pro Gln Pro His Leu Gly Val Ser Ser Ala Ala Ser Gly				
	660		665	670

P11073us seq list.ST25.txt

His Leu Gly Arg Ser Phe Leu Ser Gly Glu Pro Ser Gln Ala Asp Val
675 680 685

Gln Pro Leu Gly Pro Ser Ser Leu Ala Val His Thr Ile Leu Pro Gln
690 695 700

Glu Ser Pro Ala Leu Pro Thr Ser Leu Pro Ser Ser Leu Val Pro Pro
705 710 715 720

Val Thr Ala Ala Gln Phe Leu Thr Pro Pro Ser Gln His Ser Tyr Ser
725 730 735

Ser Pro Val Asp Asn Thr Pro Ser His Gln Leu Gln Val Pro Glu His
740 745 750

Pro Phe Leu Thr Pro Ser Pro Glu Ser Pro Asp Gln Trp Ser Ser Ser
755 760 765

Ser Pro His Ser Asn Val Ser Asp Trp Ser Glu Gly Val Ser Ser Pro
770 775 780

Pro Thr Ser Met Gln Ser Gln Ile Ala Arg Ile Pro Glu Ala Phe Lys
785 790 795 800

<210> 18

<211> 63

<212> PRT

<213> Drosophila sp.

<400> 18

Trp Lys Thr Asn Lys Ser Glu Ser Gln Tyr Thr Ser Leu Glu Tyr Asp
1 5 10 15

Phe Arg Val Thr Cys Asp Leu Asn Tyr Tyr Gly Ser Gly Cys Ala Lys
20 25 30

Phe Cys Arg Pro Arg Asp Asp Ser Phe Gly His Ser Thr Cys Ser Glu
35 40 45

Thr Gly Glu Ile Ile Cys Leu Thr Gly Trp Gln Gly Asp Tyr Cys
50 55 60

<210> 19

<211> 63

<212> PRT

<213> Homo sapiens

<400> 19

Trp Ser Gln Asp Leu His Ser Ser Gly Arg Thr Asp Leu Lys Tyr Ser
1 5 10 15

Tyr Arg Phe Val Cys Asp Glu His Tyr Tyr Gly Glu Gly Cys Ser Val
20 25 30

Phe Cys Arg Pro Arg Asp Asp Ala Phe Gly His Phe Thr Cys Gly Glu
35 40 45

P11073us seq list.ST25.txt

Arg Gly Glu Lys Val Cys Asn Pro Gly Trp Lys Gly Pro Tyr Cys
50 55 60

<210> 20

<211> 63

<212> PRT

<213> Mus musculus

<400> 20

Trp Ser Gln Asp Leu His Ser Ser Gly Arg Thr Asp Leu Arg Tyr Ser
1 5 10 15

Tyr Arg Phe Val Cys Asp Glu His Tyr Tyr Gly Glu Gly Cys Ser Val
20 25 30

Phe Cys Arg Pro Arg Asp Asp Ala Phe Gly His Phe Thr Cys Gly Asp
35 40 45

Arg Gly Glu Lys Met Cys Asp Pro Gly Trp Lys Gly Gln Tyr Cys
50 55 60

<210> 21

<211> 63

<212> PRT

<213> Rattus rattus

<400> 21

Trp Ser Gln Asp Leu His Ser Ser Gly Arg Thr Asp Leu Arg Tyr Ser
1 5 10 15

Tyr Arg Phe Val Cys Asp Glu His Tyr Tyr Gly Glu Gly Cys Ser Val
20 25 30

Phe Cys Arg Pro Arg Asp Asp Ala Phe Gly His Phe Thr Cys Gly Glu
35 40 45

Arg Gly Glu Lys Met Cys Asp Pro Gly Trp Lys Gly Gln Tyr Cys
50 55 60

<210> 22

<211> 63

<212> PRT

<213> Mus musculus

<400> 22

Trp Arg Thr Asp Glu Gln Asn Asp Thr Leu Thr Arg Leu Ser Tyr Ser
1 5 10 15

Tyr Arg Val Ile Cys Ser Asp Asn Tyr Tyr Gly Glu Ser Cys Ser Arg
20 25 30

Leu Cys Lys Lys Arg Asp Asp His Phe Gly His Tyr Glu Cys Gln Pro

35 40 45
 Asp Gly Ser Leu Ser Cys Leu Pro Gly Trp Thr Gly Lys Tyr Cys
 50 55 60
 <210> 23
 <211> 63
 <212> PRT
 <213> Homo sapiens

 <400> 23
 Trp Leu Leu Asp Glu Gln Thr Ser Thr Leu Thr Arg Leu Arg Tyr Ser
 1 5 10 15
 Tyr Arg Val Ile Cys Ser Asp Asn Tyr Tyr Gly Asp Asn Cys Ser Arg
 20 25 30
 Leu Cys Lys Lys Arg Asn Asp His Phe Gly His Tyr Val Cys Gln Pro
 35 40 45
 Asp Gly Asn Leu Ser Cys Leu Pro Gly Trp Thr Gly Glu Tyr Cys
 50 55 60
 <210> 24
 <211> 63
 <212> PRT
 <213> Rattus rattus

 <400> 24
 Trp Gln Thr Leu Lys Gln Asn Thr Gly Ile Ala His Phe Glu Tyr Gln
 1 5 10 15
 Ile Arg Val Thr Cys Asp Asp His Tyr Tyr Gly Phe Gly Cys Asn Lys
 20 25 30
 Phe Cys Arg Pro Arg Asp Asp Phe Phe Gly His Tyr Ala Cys Asp Gln
 35 40 45
 Asn Gly Asn Lys Thr Cys Met Glu Gly Trp Met Gly Pro Glu Cys
 50 55 60
 <210> 25
 <211> 63
 <212> PRT
 <213> Mus musculus

 <400> 25
 Trp Gln Thr Leu Lys Gln Asn Thr Gly Ile Ala His Phe Glu Tyr Gln
 1 5 10 15
 Ile Arg Val Thr Cys Asp Asp His Tyr Tyr Gly Phe Gly Cys Asn Lys
 20 25 30

P11073us seq list.ST25.txt

Phe Cys Arg Pro Arg Asp Asp Phe Phe Gly His Tyr Ala Cys Asp Gln
35 40 45

Asn Gly Asn Lys Thr Cys Met Glu Gly Trp Met Gly Pro Asp Cys
50 55 60

<210> 26

<211> 63

<212> PRT

<213> Homo sapiens

<400> 26

Trp Gln Thr Leu Lys Gln Asn Thr Gly Val Ala His Phe Glu Tyr Gln
1 5 10 15

Ile Arg Val Thr Cys Asp Asp Tyr Tyr Tyr Gly Phe Gly Cys Asn Lys
20 25 30

Phe Cys Arg Pro Arg Asp Asp Phe Phe Gly His Tyr Ala Cys Asp Gln
35 40 45

Asn Gly Asn Lys Thr Cys Met Glu Gly Trp Met Gly Arg Glu Cys
50 55 60

<210> 27

<211> 63

<212> PRT

<213> Gallus sp.

<400> 27

Trp Gln Thr Leu Lys His Asn Thr Gly Ala Ala His Phe Glu Tyr Gln
1 5 10 15

Ile Arg Val Thr Cys Ala Glu His Tyr Tyr Gly Phe Gly Cys Asn Lys
20 25 30

Phe Cys Arg Pro Arg Asp Asp Phe Phe Thr His His Thr Cys Asp Gln
35 40 45

Asn Gly Asn Lys Thr Cys Leu Glu Gly Trp Thr Gly Pro Glu Cys
50 55 60

<210> 28

<211> 63

<212> PRT

<213> Gallus sp.

<400> 28

Trp Lys Thr Leu Gln Phe Asn Gly Pro Val Ala Asn Phe Glu Val Gln
1 5 10 15

P11073us seq list.ST25.txt

Ile Arg Val Lys Cys Asp Glu Asn Tyr Tyr Ser Ala Leu Cys Asn Lys
20 25 30

Phe Cys Gly Pro Arg Asp Asp Phe Val Gly His Tyr Thr Cys Asp Gln
35 40 45

Asn Gly Asn Lys Ala Cys Met Glu Gly Trp Met Gly Glu Glu Cys
50 55 60

<210> 29

<211> 63

<212> PRT

<213> Mus musculus

<400> 29

Trp Lys Ser Leu His Phe Ser Gly His Val Ala His Leu Glu Leu Gln
1 5 10 15

Ile Arg Val Arg Cys Asp Glu Asn Tyr Tyr Ser Ala Thr Cys Asn Lys
20 25 30

Phe Cys Arg Pro Arg Asn Asp Phe Phe Gly His Tyr Thr Cys Asp Gln
35 40 45

Tyr Gly Asn Lys Ala Cys Met Asp Gly Trp Met Gly Lys Glu Cys
50 55 60

<210> 30

<211> 63

<212> PRT

<213> Homo sapiens

<400> 30

Trp Lys Ser Leu His Phe Ser Gly His Val Ala His Leu Glu Leu Gln
1 5 10 15

Ile Arg Val Arg Cys Asp Glu Asn Tyr Tyr Ser Ala Thr Cys Asn Lys
20 25 30

Phe Cys Arg Pro Arg Asn Asp Phe Phe Gly His Tyr Thr Cys Asp Gln
35 40 45

Tyr Gly Asn Lys Ala Cys Met Asp Gly Trp Met Gly Lys Glu Cys
50 55 60

<210> 31

<211> 63

<212> PRT

<213> Rattus rattus

<400> 31

Trp Lys Ser Leu His Phe Ser Gly His Val Ala His Leu Glu Leu Gln

P11073us seq list.ST25.txt

1 5 10 15
 Ile Arg Val Arg Cys Asp Glu Asn Tyr Tyr Ser Ala Thr Cys Asn Lys
 20 25 30
 Phe Cys Arg Pro Arg Asn Asp Phe Phe Gly His Tyr Thr Cys Asp Gln
 35 40 45
 Tyr Gly Asn Lys Ala Cys Met Asp Gly Trp Met Gly Lys Glu Cys
 50 55 60

<210> 32

<211> 63

<212> PRT

<213> Homo sapiens

<400> 32

Trp Lys Ser Leu His Phe Ser Gly His Val Ala His Leu Glu Leu Gln
 1 5 10 15
 Ile Arg Val Arg Cys Asp Glu Asn Tyr Tyr Ser Ala Thr Cys Asn Lys
 20 25 30
 Phe Cys Arg Pro Arg Asn Asp Phe Phe Gly His Tyr Thr Cys Asp Gln
 35 40 45
 Tyr Gly Asn Lys Ala Cys Met Asp Gly Trp Met Gly Lys Glu Cys
 50 55 60

<210> 33

<211> 63

<212> PRT

<213> Drosophila melanogaster

<400> 33

Trp Lys Thr Leu Asp His Ile Gly Arg Asn Ala Arg Ile Thr Tyr Arg
 1 5 10 15
 Val Arg Val Gln Cys Ala Val Thr Tyr Tyr Asn Thr Thr Cys Thr Thr
 20 25 30
 Phe Cys Arg Pro Arg Asp Asp Gln Phe Gly His Tyr Ala Cys Gly Ser
 35 40 45
 Glu Gly Gln Lys Leu Cys Leu Asn Gly Trp Gln Gly Val Asn Cys
 50 55 60

<210> 34

<211> 723

<212> PRT

<213> Homo sapiens

<400> 34

P11073us seq list.ST25.txt

Met Gly Ser Arg Cys Ala Leu Ala Leu Ala Val Leu Ser Ala Leu Leu
1 5 10 15
Cys Gln Val Trp Ser Ser Gly Val Phe Glu Leu Lys Leu Gln Glu Phe
20 25 30
Val Asn Lys Lys Gly Leu Leu Gly Asn Arg Asn Cys Cys Arg Gly Gly
35 40 45
Ala Gly Pro Pro Pro Cys Ala Cys Arg Thr Phe Phe Arg Val Cys Leu
50 55 60
Lys His Tyr Gln Ala Ser Val Ser Pro Glu Pro Pro Cys Thr Tyr Gly
65 70 75 80
Ser Ala Val Thr Pro Val Leu Gly Val Asp Ser Phe Ser Leu Pro Asp
85 90 95
Gly Gly Gly Ala Asp Ser Ala Phe Ser Asn Pro Ile Arg Phe Pro Phe
100 105 110
Gly Phe Thr Trp Pro Gly Thr Phe Ser Leu Ile Ile Glu Ala Leu His
115 120 125
Thr Asp Ser Pro Asp Asp Leu Ala Thr Glu Asn Pro Glu Arg Leu Ile
130 135 140
Ser Arg Leu Ala Thr Gln Arg His Leu Thr Val Gly Glu Glu Trp Ser
145 150 155 160
Gln Asp Leu His Ser Ser Gly Arg Thr Asp Leu Lys Tyr Ser Tyr Arg
165 170 175
Phe Val Cys Asp Glu His Tyr Tyr Gly Glu Gly Cys Ser Val Phe Cys
180 185 190
Arg Pro Arg Asp Asp Ala Phe Gly His Phe Thr Cys Gly Glu Arg Gly
195 200 205
Glu Lys Val Cys Asn Pro Gly Trp Lys Gly Pro Tyr Cys Thr Glu Pro
210 215 220
Ile Cys Leu Pro Gly Cys Asp Glu Gln His Gly Phe Cys Asp Lys Pro
225 230 235 240
Gly Glu Cys Lys Cys Arg Val Gly Trp Gln Gly Arg Tyr Cys Asp Glu
245 250 255
Cys Ile Arg Tyr Pro Gly Cys Leu His Gly Thr Cys Gln Gln Pro Trp
260 265 270
Gln Cys Asn Cys Gln Glu Gly Trp Gly Gly Leu Phe Cys Asn Gln Asp
275 280 285
Leu Asn Tyr Cys Thr His His Lys Pro Cys Lys Asn Gly Ala Thr Cys
290 295 300
Thr Asn Thr Gly Gln Gly Ser Tyr Thr Cys Ser Cys Arg Pro Gly Tyr
305 310 315 320
Thr Gly Ala Thr Cys Glu Leu Gly Ile Asp Glu Cys Asp Pro Ser Pro
325 330 335
Cys Lys Asn Gly Gly Ser Cys Thr Asp Leu Glu Asn Ser Tyr Ser Cys
340 345 350
Thr Cys Pro Pro Gly Phe Tyr Gly Lys Ile Cys Glu Leu Ser Ala Met
355 360 365

P11073us seq list.ST25.txt

Thr Cys Ala Asp Gly Pro Cys Phe Asn Gly Gly Arg Cys Ser Asp Ser
 370 375 380

Pro Asp Gly Gly Tyr Ser Cys Arg Cys Pro Val Gly Tyr Ser Gly Phe
 385 390 395 400

Asn Cys Glu Lys Lys Ile Asp Tyr Cys Ser Ser Ser Pro Cys Ser Asn
 405 410 415

Gly Ala Lys Cys Val Asp Leu Gly Asp Ala Tyr Leu Cys Arg Cys Gln
 420 425 430

Ala Gly Phe Ser Gly Arg His Cys Asp Asp Asn Val Asp Asp Cys Ala
 435 440 445

Ser Ser Pro Cys Ala Asn Gly Gly Thr Cys Arg Asp Gly Val Asn Asp
 450 455 460

Phe Ser Cys Thr Cys Pro Pro Gly Tyr Thr Gly Arg Asn Cys Ser Ala
 465 470 475 480

Pro Val Ser Arg Cys Glu His Ala Pro Cys His Asn Gly Ala Thr Cys
 485 490 495

His Glu Arg Gly His Gly Tyr Val Cys Glu Cys Ala Arg Gly Tyr Gly
 500 505 510

Gly Pro Asn Cys Gln Phe Leu Leu Pro Glu Leu Pro Pro Gly Pro Ala
 515 520 525

Val Val Asp Leu Thr Glu Lys Leu Glu Gly Gln Gly Gly Pro Phe Pro
 530 535 540

Trp Val Ala Val Cys Ala Gly Val Ile Leu Val Leu Met Leu Leu Leu
 545 550 555 560

Gly Cys Ala Ala Val Val Val Cys Val Arg Leu Arg Leu Gln Lys His
 565 570 575

Arg Pro Pro Ala Asp Pro Cys Arg Gly Glu Thr Glu Thr Met Asn Asn
 580 585 590

Leu Ala Asn Cys Gln Arg Glu Lys Asp Ile Ser Val Ser Ile Ile Gly
 595 600 605

Ala Thr Gln Ile Lys Asn Thr Asn Lys Lys Ala Asp Phe His Gly Asp
 610 615 620

His Ser Ala Asp Lys Asn Gly Phe Lys Ala Arg Tyr Pro Ala Val Asp
 625 630 635 640

Tyr Asn Leu Val Gln Asp Leu Lys Gly Asp Asp Thr Ala Val Arg Asp
 645 650 655

Ala His Ser Lys Arg Asp Thr Lys Cys Gln Pro Gln Gly Ser Ser Gly
 660 665 670

Glu Glu Lys Gly Thr Pro Thr Thr Leu Arg Gly Gly Glu Ala Ser Glu
 675 680 685

Arg Lys Arg Pro Asp Ser Gly Cys Ser Thr Ser Lys Asp Thr Lys Tyr
 690 695 700

Gln Ser Val Tyr Val Ile Ser Glu Glu Lys Asp Glu Cys Val Ile Ala
 705 710 715 720

Thr Glu Val

<211> 618

<212> PRT

<213> Homo sapiens

<400> 35

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Met Val Ser Pro Arg Met Ser Gly Leu Leu Ser Gln Thr Val Ile Leu
1          5          10          15
Ala Leu Ile Phe Leu Pro Gln Thr Arg Pro Ala Gly Val Phe Glu Leu
          20          25          30
Gln Ile His Ser Phe Gly Pro Gly Pro Gly Pro Gly Ala Pro Arg Ser
          35          40          45
Pro Cys Ser Ala Arg Leu Pro Cys Arg Leu Phe Phe Arg Val Cys Leu
          50          55          60
Lys Pro Gly Leu Ser Glu Glu Ala Ala Glu Ser Pro Cys Ala Leu Gly
65          70          75          80
Ala Ala Leu Ser Ala Arg Gly Pro Val Tyr Thr Glu Gln Pro Gly Ala
          85          90          95
Pro Ala Pro Asp Leu Pro Leu Pro Asp Gly Leu Leu Gln Val Pro Phe
          100          105          110
Arg Asp Ala Trp Pro Gly Thr Phe Ser Phe Ile Ile Glu Thr Trp Arg
          115          120          125
Glu Glu Leu Gly Asp Gln Ile Gly Gly Pro Ala Trp Ser Leu Leu Ala
          130          135          140
Arg Val Ala Gly Arg Arg Arg Leu Ala Ala Gly Gly Pro Trp Ala Arg
          145          150          155          160
Asp Ile Gln Arg Ala Gly Ala Trp Glu Leu Arg Phe Ser Tyr Arg Ala
          165          170          175
Arg Cys Glu Pro Pro Ala Val Gly Thr Ala Cys Thr Arg Leu Cys Arg
          180          185          190
Pro Arg Ser Ala Pro Ser Arg Cys Gly Pro Gly Leu Arg Pro Cys Ala
          195          200          205
Pro Leu Glu Asp Glu Cys Glu Ala Pro Leu Val Cys Arg Ala Gly Cys
          210          215          220
Ser Pro Glu His Gly Phe Cys Glu Gln Pro Gly Glu Cys Arg Cys Leu
          225          230          235          240
Glu Gly Trp Thr Gly Pro Leu Cys Thr Val Pro Val Ser Thr Ser Ser
          245          250          255
Cys Leu Ser Pro Arg Gly Pro Ser Ser Ala Thr Thr Gly Cys Leu Val
          260          265          270
Pro Gly Pro Gly Pro Cys Asp Gly Asn Pro Cys Ala Asn Gly Gly Ser
          275          280          285
Cys Ser Glu Thr Pro Arg Ser Phe Glu Cys Thr Cys Pro Arg Gly Phe
          290          295          300
Tyr Gly Leu Arg Cys Glu Val Ser Gly Val Thr Cys Ala Asp Gly Pro
          305          310          315          320

```

P11073us seq list.ST25.txt

Cys Phe Asn Gly Gly Leu Cys Val Gly Gly Ala Asp Pro Asp Ser Ala
325 330 335

Tyr Ile Cys His Cys Pro Pro Gly Phe Gln Gly Ser Asn Cys Glu Lys
340 345 350

Arg Val Asp Arg Cys Ser Leu Gln Pro Cys Arg Asn Gly Gly Leu Cys
355 360 365

Leu Asp Leu Gly His Ala Leu Arg Cys Arg Cys Arg Ala Gly Phe Ala
370 375 380

Gly Pro Arg Cys Glu His Asp Leu Asp Asp Cys Ala Gly Arg Ala Cys
385 390 395 400

Ala Asn Gly Gly Thr Cys Val Glu Gly Gly Gly Ala His Arg Cys Ser
405 410 415

Cys Ala Leu Gly Phe Gly Gly Arg Asp Cys Arg Glu Arg Ala Asp Pro
420 425 430

Cys Ala Ala Arg Pro Cys Ala His Gly Gly Arg Cys Tyr Ala His Phe
435 440 445

Ser Gly Leu Val Cys Ala Cys Ala Pro Gly Tyr Met Gly Ala Arg Cys
450 455 460

Glu Phe Pro Val His Pro Asp Gly Ala Ser Ala Leu Pro Ala Ala Pro
465 470 475 480

Pro Gly Leu Arg Pro Gly Asp Pro Gln Arg Tyr Leu Leu Pro Pro Ala
485 490 495

Leu Gly Leu Leu Val Ala Ala Gly Val Ala Gly Ala Ala Leu Leu Leu
500 505 510

Val His Val Arg Arg Arg Gly His Ser Gln Asp Ala Gly Ser Arg Leu
515 520 525

Leu Ala Gly Thr Pro Glu Pro Ser Val His Ala Leu Pro Asp Ala Leu
530 535 540

Asn Asn Leu Arg Thr Gln Glu Gly Ser Gly Asp Gly Pro Ser Ser Ser
545 550 555 560

Val Asp Trp Asn Arg Pro Glu Asp Val Asp Pro Gln Gly Ile Tyr Val
565 570 575

Ile Ser Ala Pro Ser Ile Tyr Ala Arg Glu Val Ala Thr Pro Leu Phe
580 585 590

Pro Pro Leu His Thr Gly Arg Ala Gly Gln Arg Gln His Leu Leu Phe
595 600 605

Pro Tyr Pro Ser Ser Ile Leu Ser Val Lys
610 615

<210> 36

<211> 685

<212> PRT

<213> Homo sapiens

<400> 36

P11073us seq list.ST25.txt

Met Ala Ala Ala Ser Arg Ser Ala Ser Gly Trp Ala Leu Leu Leu Leu
1 5 10 15
Val Ala Leu Trp Gln Gln Arg Ala Ala Gly Ser Gly Val Phe Gln Leu
20 25 30
Gln Leu Gln Glu Phe Ile Asn Glu Arg Gly Val Leu Ala Ser Gly Arg
35 40 45
Pro Cys Glu Pro Gly Cys Arg Thr Phe Phe Arg Val Cys Leu Lys His
50 55 60
Phe Gln Ala Val Val Ser Pro Gly Pro Cys Thr Phe Gly Thr Val Ser
65 70 75 80
Thr Pro Val Leu Gly Thr Asn Ser Phe Ala Val Arg Asp Asp Ser Ser
85 90 95
Gly Gly Gly Arg Asn Pro Leu Gln Leu Pro Phe Asn Phe Thr Trp Pro
100 105 110
Gly Thr Phe Ser Leu Ile Ile Glu Ala Trp His Ala Pro Gly Asp Asp
115 120 125
Leu Arg Pro Glu Ala Leu Pro Pro Asp Ala Leu Ile Ser Lys Ile Ala
130 135 140
Ile Gln Gly Ser Leu Ala Val Gly Gln Asn Trp Leu Leu Asp Glu Gln
145 150 155 160
Thr Ser Thr Leu Thr Arg Leu Arg Tyr Ser Tyr Arg Val Ile Cys Ser
165 170 175
Asp Asn Tyr Tyr Gly Asp Asn Cys Ser Arg Leu Cys Lys Lys Arg Asn
180 185 190
Asp His Phe Gly His Tyr Val Cys Gln Pro Asp Gly Asn Leu Ser Cys
195 200 205
Leu Pro Gly Trp Thr Gly Glu Tyr Cys Gln Gln Pro Ile Cys Leu Ser
210 215 220
Gly Cys His Glu Gln Asn Gly Tyr Cys Ser Lys Pro Ala Glu Cys Leu
225 230 235 240
Cys Arg Pro Gly Trp Gln Gly Arg Leu Cys Asn Glu Cys Ile Pro His
245 250 255
Asn Gly Cys Arg His Gly Thr Cys Ser Thr Pro Trp Gln Cys Thr Cys
260 265 270
Asp Glu Gly Trp Gly Gly Leu Phe Cys Asp Gln Asp Leu Asn Tyr Cys
275 280 285
Thr His His Ser Pro Cys Lys Asn Gly Ala Thr Cys Ser Asn Ser Gly
290 295 300
Gln Arg Ser Tyr Thr Cys Thr Cys Arg Pro Gly Tyr Thr Gly Val Asp
305 310 315 320
Cys Glu Leu Glu Leu Ser Glu Cys Asp Ser Asn Pro Cys Arg Asn Gly
325 330 335
Gly Ser Cys Lys Asp Gln Glu Asp Gly Tyr His Cys Leu Cys Pro Pro
340 345 350
Gly Tyr Tyr Gly Leu His Cys Glu His Ser Thr Leu Ser Cys Ala Asp
355 360 365
Ser Pro Cys Phe Asn Gly Gly Ser Cys Arg Glu Arg Asn Gln Gly Ala

P11073us seq list.ST25.txt

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370                               375                               380
Asn Tyr Ala Cys Glu Cys Pro Pro Asn Phe Thr Gly Ser Asn Cys Glu
385                               390                               395                               400
Lys Lys Val Asp Arg Cys Thr Ser Asn Pro Cys Ala Asn Gly Gly Gln
                               405                               410                               415
Cys Leu Asn Arg Gly Pro Ser Arg Met Cys Arg Cys Arg Pro Gly Phe
                               420                               425                               430
Thr Gly Thr Tyr Cys Glu Leu His Val Ser Asp Cys Ala Arg Asn Pro
                               435                               440                               445
Cys Ala His Gly Gly Thr Cys His Asp Leu Glu Asn Gly Leu Met Cys
                               450                               455                               460
Thr Cys Pro Ala Gly Phe Ser Gly Arg Arg Cys Glu Val Arg Thr Ser
465                               470                               475                               480
Ile Asp Ala Cys Ala Ser Ser Pro Cys Phe Asn Arg Ala Thr Cys Tyr
                               485                               490                               495
Thr Asp Leu Ser Thr Asp Thr Phe Val Cys Asn Cys Pro Tyr Gly Phe
                               500                               505                               510
Val Gly Ser Arg Cys Glu Phe Pro Val Gly Leu Pro Pro Ser Phe Pro
                               515                               520                               525
Trp Val Ala Val Ser Leu Gly Val Gly Leu Ala Val Leu Leu Val Leu
530                               535                               540
Leu Gly Met Val Ala Val Ala Val Arg Gln Leu Arg Leu Arg Arg Pro
545                               550                               555                               560
Asp Asp Gly Ser Arg Glu Ala Met Asn Asn Leu Ser Asp Phe Gln Lys
                               565                               570                               575
Asp Asn Leu Ile Pro Ala Ala Gln Leu Lys Asn Thr Asn Gln Lys Lys
                               580                               585                               590
Glu Leu Glu Val Asp Cys Gly Leu Asp Lys Ser Asn Cys Gly Lys Gln
                               595                               600                               605
Gln Asn His Thr Leu Asp Tyr Asn Leu Ala Pro Gly Pro Leu Gly Arg
610                               615                               620
Gly Thr Met Pro Gly Lys Phe Pro His Ser Asp Lys Ser Leu Gly Glu
625                               630                               635                               640
Lys Ala Pro Leu Arg Leu His Ser Glu Lys Pro Glu Cys Arg Ile Ser
                               645                               650                               655
Ala Ile Cys Ser Pro Arg Asp Ser Met Tyr Gln Ser Val Cys Leu Ile
                               660                               665                               670
Ser Glu Glu Arg Asn Glu Cys Val Ile Ala Thr Glu Val
675                               680                               685

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<210> 37

<211> 1218

<212> PRT

<213> Homo sapiens

<400> 37

P11073us seq list.ST25.txt

Met Arg Ser Pro Arg Thr Arg Gly Arg Ser Gly Arg Pro Leu Ser Leu
1 5 10 15

Leu Leu Ala Leu Leu Cys Ala Leu Arg Ala Lys Val Cys Gly Ala Ser
20 25 30

Gly Gln Phe Glu Leu Glu Ile Leu Ser Met Gln Asn Val Asn Gly Glu
35 40 45

Leu Gln Asn Gly Asn Cys Cys Gly Gly Ala Arg Asn Pro Gly Asp Arg
50 55 60

Lys Cys Thr Arg Asp Glu Cys Asp Thr Tyr Phe Lys Val Cys Leu Lys
65 70 75 80

Glu Tyr Gln Ser Arg Val Thr Ala Gly Gly Pro Cys Ser Phe Gly Ser
85 90 95

Gly Ser Thr Pro Val Ile Gly Gly Asn Thr Phe Asn Leu Lys Ala Ser
100 105 110

Arg Gly Asn Asp Arg Asn Arg Ile Val Leu Pro Phe Ser Phe Ala Trp
115 120 125

Pro Arg Ser Tyr Thr Leu Leu Val Glu Ala Trp Asp Ser Ser Asn Asp
130 135 140

Thr Val Gln Pro Asp Ser Ile Ile Glu Lys Ala Ser His Ser Gly Met
145 150 155 160

Ile Asn Pro Ser Arg Gln Trp Gln Thr Leu Lys Gln Asn Thr Gly Val
165 170 175

Ala His Phe Glu Tyr Gln Ile Arg Val Thr Cys Asp Asp Tyr Tyr Tyr
180 185 190

Gly Phe Gly Cys Asn Lys Phe Cys Arg Pro Arg Asp Asp Phe Phe Gly
195 200 205

His Tyr Ala Cys Asp Gln Asn Gly Asn Lys Thr Cys Met Glu Gly Trp
210 215 220

Met Gly Pro Glu Cys Asn Arg Ala Ile Cys Arg Gln Gly Cys Ser Pro
225 230 235 240

Lys His Gly Ser Cys Lys Leu Pro Gly Asp Cys Arg Cys Gln Tyr Gly
245 250 255

Trp Gln Gly Leu Tyr Cys Asp Lys Cys Ile Pro His Pro Gly Cys Val
260 265 270

His Gly Ile Cys Asn Glu Pro Trp Gln Cys Leu Cys Glu Thr Asn Trp
275 280 285

Gly Gly Gln Leu Cys Asp Lys Asp Leu Asn Tyr Cys Gly Thr His Gln
290 295 300

Pro Cys Leu Asn Gly Gly Thr Cys Ser Asn Thr Gly Pro Asp Lys Tyr
305 310 315 320

Gln Cys Ser Cys Pro Glu Gly Tyr Ser Gly Pro Asn Cys Glu Ile Ala
325 330 335

Glu His Ala Cys Leu Ser Asp Pro Cys His Asn Arg Gly Ser Cys Lys
340 345 350

Glu Thr Ser Leu Gly Phe Glu Cys Glu Cys Ser Pro Gly Trp Thr Gly
355 360 365

P11073us seq list.ST25.txt

Pro Thr Cys Ser Thr Asn Ile Asp Asp Cys Ser Pro Asn Asn Cys Ser
370 375 380

His Gly Gly Thr Cys Gln Asp Leu Val Asn Gly Phe Lys Cys Val Cys
385 390 395 400

Pro Pro Gln Trp Thr Gly Lys Thr Cys Gln Leu Asp Ala Asn Glu Cys
405 410 415

Glu Ala Lys Pro Cys Val Asn Ala Lys Ser Cys Lys Asn Leu Ile Ala
420 425 430

Ser Tyr Tyr Cys Asp Cys Leu Pro Gly Trp Met Gly Gln Asn Cys Asp
435 440 445

Ile Asn Ile Asn Asp Cys Leu Gly Gln Cys Gln Asn Asp Ala Ser Cys
450 455 460

Arg Asp Leu Val Asn Gly Tyr Arg Cys Ile Cys Pro Pro Gly Tyr Ala
465 470 475 480

Gly Asp His Cys Glu Arg Asp Ile Asp Glu Cys Ala Ser Asn Pro Cys
485 490 495

Leu Asn Gly Gly His Cys Gln Asn Glu Ile Asn Arg Phe Gln Cys Leu
500 505 510

Cys Pro Thr Gly Phe Ser Gly Asn Leu Cys Gln Leu Asp Ile Asp Tyr
515 520 525

Cys Glu Pro Asn Pro Cys Gln Asn Gly Ala Gln Cys Tyr Asn Arg Ala
530 535 540

Ser Asp Tyr Phe Cys Lys Cys Pro Glu Asp Tyr Glu Gly Lys Asn Cys
545 550 555 560

Ser His Leu Lys Asp His Cys Arg Thr Thr Pro Cys Glu Val Ile Asp
565 570 575

Ser Cys Thr Val Ala Met Ala Ser Asn Asp Thr Pro Glu Gly Val Arg
580 585 590

Tyr Ile Ser Ser Asn Val Cys Gly Pro His Gly Lys Cys Lys Ser Gln
595 600 605

Ser Gly Gly Lys Phe Thr Cys Asp Cys Asn Lys Gly Phe Thr Gly Thr
610 615 620

Tyr Cys His Glu Asn Ile Asn Asp Cys Glu Ser Asn Pro Cys Arg Asn
625 630 635 640

Gly Gly Thr Cys Ile Asp Gly Val Asn Ser Tyr Lys Cys Ile Cys Ser
645 650 655

Asp Gly Trp Glu Gly Ala Tyr Cys Glu Thr Asn Ile Asn Asp Cys Ser
660 665 670

Gln Asn Pro Cys His Asn Gly Gly Thr Cys Arg Asp Leu Val Asn Asp
675 680 685

Phe Tyr Cys Asp Cys Lys Asn Gly Trp Lys Gly Lys Thr Cys His Ser
690 695 700

Arg Asp Ser Gln Cys Asp Glu Ala Thr Cys Asn Asn Gly Gly Thr Cys
705 710 715 720

Tyr Asp Glu Gly Asp Ala Phe Lys Cys Met Cys Pro Gly Gly Trp Glu
725 730 735

Gly Thr Thr Cys Asn Ile Ala Arg Asn Ser Ser Cys Leu Pro Asn Pro

P11073us seq list.ST25.txt

740		745		750
Cys His Asn Gly Gly Thr Cys Val Val Asn Gly Glu Ser Phe Thr Cys	755	760	765	
Val Cys Lys Glu Gly Trp Glu Gly Pro Ile Cys Ala Gln Asn Thr Asn	770	775	780	
Asp Cys Ser Pro His Pro Cys Tyr Asn Ser Gly Thr Cys Val Asp Gly	785	790	795	800
Asp Asn Trp Tyr Arg Cys Glu Cys Ala Pro Gly Phe Ala Gly Pro Asp	805	810	815	
Cys Arg Ile Asn Ile Asn Glu Cys Gln Ser Ser Pro Cys Ala Phe Gly	820	825	830	
Ala Thr Cys Val Asp Glu Ile Asn Gly Tyr Arg Cys Val Cys Pro Pro	835	840	845	
Gly His Ser Gly Ala Lys Cys Gln Glu Val Ser Gly Arg Pro Cys Ile	850	855	860	
Thr Met Gly Ser Val Ile Pro Asp Gly Ala Lys Trp Asp Asp Asp Cys	865	870	875	880
Asn Thr Cys Gln Cys Leu Asn Gly Arg Ile Ala Cys Ser Lys Val Trp	885	890	895	
Cys Gly Pro Arg Pro Cys Leu Leu His Lys Gly His Ser Glu Cys Pro	900	905	910	
Ser Gly Gln Ser Cys Ile Pro Ile Leu Asp Asp Gln Cys Phe Val His	915	920	925	
Pro Cys Thr Gly Val Gly Glu Cys Arg Ser Ser Ser Leu Gln Pro Val	930	935	940	
Lys Thr Lys Cys Thr Ser Asp Ser Tyr Tyr Gln Asp Asn Cys Ala Asn	945	950	955	960
Ile Thr Phe Thr Phe Asn Lys Glu Met Met Ser Pro Gly Leu Thr Thr	965	970	975	
Glu His Ile Cys Ser Glu Leu Arg Asn Leu Asn Ile Leu Lys Asn Val	980	985	990	
Ser Ala Glu Tyr Ser Ile Tyr Ile Ala Cys Glu Pro Ser Pro Ser Ala	995	1000	1005	
Asn Asn Glu Ile His Val Ala Ile Ser Ala Glu Asp Ile Arg Asp	1010	1015	1020	
Asp Gly Asn Pro Ile Lys Glu Ile Thr Asp Lys Ile Ile Asp Leu	1025	1030	1035	
Val Ser Lys Arg Asp Gly Asn Ser Ser Leu Ile Ala Ala Val Ala	1040	1045	1050	
Glu Val Arg Val Gln Arg Arg Pro Leu Lys Asn Arg Thr Asp Phe	1055	1060	1065	
Leu Val Pro Leu Leu Ser Ser Val Leu Thr Val Ala Trp Ile Cys	1070	1075	1080	
Cys Leu Val Thr Ala Phe Tyr Trp Cys Leu Arg Lys Arg Arg Lys	1085	1090	1095	
Pro Gly Ser His Thr His Ser Ala Ser Glu Asp Asn Thr Thr Asn	1100	1105	1110	

P11073us seq list.ST25.txt

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Asn Val  Arg Glu Gln Leu Asn  Gln Ile Lys Asn Pro  Ile Glu Lys
1115                1120                1125

His Gly  Ala Asn Thr Val Pro  Ile Lys Asp Tyr Glu  Asn Lys Asn
1130                1135                1140

Ser Lys  Met Ser Lys Ile Arg  Thr His Asn Ser Glu  Val Glu Glu
1145                1150                1155

Asp Asp  Met Asp Lys His Gln  Gln Lys Ala Arg Phe  Ala Lys Gln
1160                1165                1170

Pro Ala  Tyr Thr Leu Val Asp  Arg Glu Glu Lys Pro  Pro Asn Gly
1175                1180                1185

Thr Pro  Thr Lys His Pro Asn  Trp Thr Asn Lys Gln  Asp Asn Arg
1190                1195                1200

Asp Leu  Glu Ser Ala Gln Ser  Leu Asn Arg Met Glu  Tyr Ile Val
1205                1210                1215

<210>  38

<211> 1238

<212>  PRT

<213>  Homo sapiens

<400>  38

Met Arg Ala Gln Gly Arg Gly Arg Leu Pro Arg Arg Leu Leu Leu Leu
1          5          10          15

Leu Ala Leu Trp Val Gln Ala Ala Arg Pro Met Gly Tyr Phe Glu Leu
20        25        30

Gln Leu Ser Ala Leu Arg Asn Val Asn Gly Glu Leu Leu Ser Gly Ala
35        40        45

Cys Cys Asp Gly Asp Gly Arg Thr Thr Arg Ala Gly Gly Cys Gly His
50        55        60

Asp Glu Cys Asp Thr Tyr Val Arg Val Cys Leu Lys Glu Tyr Gln Ala
65        70        75        80

Lys Val Thr Pro Thr Gly Pro Cys Ser Tyr Gly His Gly Ala Thr Pro
85        90        95

Val Leu Gly Gly Asn Ser Phe Tyr Leu Pro Pro Ala Gly Ala Ala Gly
100       105       110

Asp Arg Ala Arg Ala Arg Ala Arg Ala Gly Gly Asp Gln Asp Pro Gly
115       120       125

Leu Val Val Ile Pro Phe Gln Phe Ala Trp Pro Arg Ser Phe Thr Leu
130       135       140

Ile Val Glu Ala Trp Asp Trp Asp Asn Asp Thr Thr Pro Asn Glu Glu
145       150       155       160

Leu Leu Ile Glu Arg Val Ser His Ala Gly Met Ile Asn Pro Glu Asp
165       170       175

Arg Trp Lys Ser Leu His Phe Ser Gly His Val Ala His Leu Glu Leu
180       185       190

```

P11073us seq list.ST25.txt

Gln Ile Arg Val Arg Cys Asp Glu Asn Tyr Tyr Ser Ala Thr Cys Asn
195 200 205

Lys Phe Cys Arg Pro Arg Asn Asp Phe Phe Gly His Tyr Thr Cys Asp
210 215 220

Gln Tyr Gly Asn Lys Ala Cys Met Asp Gly Trp Met Gly Lys Glu Cys
225 230 235 240

Lys Glu Ala Val Cys Lys Gln Gly Cys Asn Leu Leu His Gly Gly Cys
245 250 255

Thr Val Pro Gly Glu Cys Arg Cys Ser Tyr Gly Trp Gln Gly Arg Phe
260 265 270

Cys Asp Glu Cys Val Pro Tyr Pro Gly Cys Val His Gly Ser Cys Val
275 280 285

Glu Pro Trp Gln Cys Asn Cys Glu Thr Asn Trp Gly Gly Leu Leu Cys
290 295 300

Asp Lys Asp Leu Asn Tyr Cys Gly Ser His His Pro Cys Thr Asn Gly
305 310 315 320

Gly Thr Cys Ile Asn Ala Glu Pro Asp Gln Tyr Arg Cys Thr Cys Pro
325 330 335

Asp Gly Tyr Ser Gly Arg Asn Cys Glu Lys Ala Glu His Ala Cys Thr
340 345 350

Ser Asn Pro Cys Ala Asn Gly Gly Ser Cys His Glu Val Pro Ser Gly
355 360 365

Phe Glu Cys His Cys Pro Ser Gly Trp Ser Gly Pro Thr Cys Ala Leu
370 375 380

Asp Ile Asp Glu Cys Ala Ser Asn Pro Cys Ala Ala Gly Gly Thr Cys
385 390 395 400

Val Asp Gln Val Asp Gly Phe Glu Cys Ile Cys Pro Glu Gln Trp Val
405 410 415

Gly Ala Thr Cys Gln Leu Asp Ala Asn Glu Cys Glu Gly Lys Pro Cys
420 425 430

Leu Asn Ala Phe Ser Cys Lys Asn Leu Ile Gly Gly Tyr Tyr Cys Asp
435 440 445

Cys Ile Pro Gly Trp Lys Gly Ile Asn Cys His Ile Asn Val Asn Asp
450 455 460

Cys Arg Gly Gln Cys Gln His Gly Gly Thr Cys Lys Asp Leu Val Asn
465 470 475 480

Gly Tyr Gln Cys Val Cys Pro Arg Gly Phe Gly Gly Arg His Cys Glu
485 490 495

Leu Glu Arg Asp Lys Cys Ala Ser Ser Pro Cys His Ser Gly Gly Leu
500 505 510

Cys Glu Asp Leu Ala Asp Gly Phe His Cys His Cys Pro Gln Gly Phe
515 520 525

Ser Gly Pro Leu Cys Glu Val Asp Val Asp Leu Cys Glu Pro Ser Pro
530 535 540

Cys Arg Asn Gly Ala Arg Cys Tyr Asn Leu Glu Gly Asp Tyr Tyr Cys
545 550 555 560

Ala Cys Pro Asp Asp Phe Gly Gly Lys Asn Cys Ser Val Pro Arg Glu

565

Pro Cys Pro Gly Gly Ala Cys Arg Val Ile Asp Gly Cys Gly Ser Asp
580 585 590

Ala Gly Pro Gly Met Pro Gly Thr Ala Ala Ser Gly Val Cys Gly Pro
595 600 605

His Gly Arg Cys Val Ser Gln Pro Gly Gly Asn Phe Ser Cys Ile Cys
610 615 620

Asp Ser Gly Phe Thr Gly Thr Tyr Cys His Glu Asn Ile Asp Asp Cys
625 630 635 640

Leu Gly Gln Pro Cys Arg Asn Gly Gly Thr Cys Ile Asp Glu Val Asp
645 650 655

Ala Phe Arg Cys Phe Cys Pro Ser Gly Trp Glu Gly Glu Leu Cys Asp
660 665 670

Thr Asn Pro Asn Asp Cys Leu Pro Asp Pro Cys His Ser Arg Gly Arg
675 680 685

Cys Tyr Asp Leu Val Asn Asp Phe Tyr Cys Ala Cys Asp Asp Gly Trp
690 695 700

Lys Gly Lys Thr Cys His Ser Arg Glu Phe Gln Cys Asp Ala Tyr Thr
705 710 715 720

Cys Ser Asn Gly Gly Thr Cys Tyr Asp Ser Gly Asp Thr Phe Arg Cys
725 730 735

Ala Cys Pro Pro Gly Trp Lys Gly Ser Thr Cys Ala Val Ala Lys Asn
740 745 750

Ser Ser Cys Leu Pro Asn Pro Cys Val Asn Gly Gly Thr Cys Val Gly
755 760 765

Ser Gly Ala Ser Phe Ser Cys Ile Cys Arg Asp Gly Trp Glu Gly Arg
770 775 780

Thr Cys Thr His Asn Thr Asn Asp Cys Asn Pro Leu Pro Cys Tyr Asn
785 790 795 800

Gly Gly Ile Cys Val Asp Gly Val Asn Trp Phe Arg Cys Glu Cys Ala
805 810 815

Pro Gly Phe Ala Gly Pro Asp Cys Arg Ile Asn Ile Asp Glu Cys Gln
820 825 830

Ser Ser Pro Cys Ala Tyr Gly Ala Thr Cys Val Asp Glu Ile Asn Gly
835 840 845

Tyr Arg Cys Ser Cys Pro Pro Gly Arg Ala Gly Pro Arg Cys Gln Glu
850 855 860

Val Ile Gly Phe Gly Arg Ser Cys Trp Ser Arg Gly Thr Pro Phe Pro
865 870 875 880

His Gly Ser Ser Trp Val Glu Asp Cys Asn Ser Cys Arg Cys Leu Asp
885 890 895

Gly Arg Arg Asp Cys Ser Lys Val Trp Cys Gly Trp Lys Pro Cys Leu
900 905 910

Leu Ala Gly Gln Pro Glu Ala Leu Ser Ala Gln Cys Pro Leu Gly Gln
915 920 925

Arg Cys Leu Glu Lys Ala Pro Gly Gln Cys Leu Arg Pro Pro Cys Glu
930 935 940

P11073us seq list.ST25.txt

Ala Trp Gly Glu Cys Gly Ala Glu Glu Pro Pro Ser Thr Pro Cys Leu
945 950 955 960

Pro Arg Ser Gly His Leu Asp Asn Asn Cys Ala Arg Leu Thr Leu His
965 970 975

Phe Asn Arg Asp His Val Pro Gln Gly Thr Thr Val Gly Ala Ile Cys
980 985 990

Ser Gly Ile Arg Ser Leu Pro Ala Thr Arg Ala Val Ala Arg Asp Arg
995 1000 1005

Leu Leu Val Leu Leu Cys Asp Arg Ala Ser Ser Gly Ala Ser Ala
1010 1015 1020

Val Glu Val Ala Val Ser Phe Ser Pro Ala Arg Asp Leu Pro Asp
1025 1030 1035

Ser Ser Leu Ile Gln Gly Ala Ala His Ala Ile Val Ala Ala Ile
1040 1045 1050

Thr Gln Arg Gly Asn Ser Ser Leu Leu Leu Ala Val Thr Glu Val
1055 1060 1065

Lys Val Glu Thr Val Val Thr Gly Gly Ser Ser Thr Gly Leu Leu
1070 1075 1080

Val Pro Val Leu Cys Gly Ala Phe Ser Val Leu Trp Leu Ala Cys
1085 1090 1095

Val Val Leu Cys Val Trp Trp Thr Arg Lys Arg Arg Lys Glu Arg
1100 1105 1110

Glu Arg Ser Arg Leu Pro Arg Glu Glu Ser Ala Asn Asn Gln Trp
1115 1120 1125

Ala Pro Leu Asn Pro Ile Arg Asn Pro Ile Glu Arg Pro Gly Gly
1130 1135 1140

His Lys Asp Val Leu Tyr Gln Cys Lys Asn Phe Thr Pro Pro Pro
1145 1150 1155

Arg Arg Ala Asp Glu Ala Leu Pro Gly Pro Ala Gly His Ala Ala
1160 1165 1170

Val Arg Glu Asp Glu Glu Asp Glu Asp Leu Gly Arg Gly Glu Glu
1175 1180 1185

Asp Ser Leu Glu Ala Glu Lys Phe Leu Ser His Lys Phe Thr Lys
1190 1195 1200

Asp Pro Gly Arg Ser Pro Gly Arg Pro Ala His Trp Ala Ser Gly
1205 1210 1215

Pro Lys Val Asp Asn Arg Ala Val Arg Ser Ile Asn Glu Ala Arg
1220 1225 1230

Tyr Ala Gly Lys Glu
1235

<210> 39

<211> 2556

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (891)..(891)

<223> X is any amino acid

<400> 39

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Met Pro Pro Leu Leu Ala Pro Leu Leu Cys Leu Ala Leu Leu Pro Ala
1          5          10          15

Leu Ala Ala Arg Gly Pro Arg Cys Ser Gln Pro Gly Glu Thr Cys Leu
20          25          30

Asn Gly Gly Lys Cys Glu Ala Ala Asn Gly Thr Glu Ala Cys Val Cys
35          40          45

Gly Gly Ala Phe Val Gly Pro Arg Cys Gln Asp Pro Asn Pro Cys Leu
50          55          60

Ser Thr Pro Cys Lys Asn Ala Gly Thr Cys His Val Val Asp Arg Arg
65          70          75          80

Gly Val Ala Asp Tyr Ala Cys Ser Cys Ala Leu Gly Phe Ser Gly Pro
85          90          95

Leu Cys Leu Thr Pro Leu Asp Asn Ala Cys Leu Thr Asn Pro Cys Arg
100         105         110

Asn Gly Gly Thr Cys Asp Leu Leu Thr Leu Thr Glu Tyr Lys Cys Arg
115         120         125

Cys Pro Pro Gly Trp Ser Gly Lys Ser Cys Gln Gln Ala Asp Pro Cys
130         135         140

Ala Ser Asn Pro Cys Ala Asn Gly Gly Gln Cys Leu Pro Phe Glu Ala
145         150         155         160

Ser Tyr Ile Cys His Cys Pro Pro Ser Phe His Gly Pro Thr Cys Arg
165         170         175

Gln Asp Val Asn Glu Cys Gly Gln Lys Pro Arg Leu Cys Arg His Gly
180         185         190

Gly Thr Cys His Asn Glu Val Gly Ser Tyr Arg Cys Val Cys Arg Ala
195         200         205

Thr His Thr Gly Pro Asn Cys Glu Arg Pro Tyr Val Pro Cys Ser Pro
210         215         220

Ser Pro Cys Gln Asn Gly Gly Thr Cys Arg Pro Thr Gly Asp Val Thr
225         230         235         240

His Glu Cys Ala Cys Leu Pro Gly Phe Thr Gly Gln Asn Cys Glu Glu
245         250         255

Asn Ile Asp Asp Cys Pro Gly Asn Asn Cys Lys Asn Gly Gly Ala Cys
260         265         270

Val Asp Gly Val Asn Thr Tyr Asn Cys Pro Cys Pro Pro Glu Trp Thr
275         280         285

Gly Gln Tyr Cys Thr Glu Asp Val Asp Glu Cys Gln Leu Met Pro Asn
290         295         300

```

P11073us seq list.ST25.txt

Ala Cys Gln Asn Gly Gly Thr Cys His Asn Thr His Gly Gly Tyr Asn
305 310 315 320

Cys Val Cys Val Asn Gly Trp Thr Gly Glu Asp Cys Ser Glu Asn Ile
325 330 335

Asp Asp Cys Ala Ser Ala Ala Cys Phe His Gly Ala Thr Cys His Asp
340 345 350

Arg Val Ala Ser Phe Tyr Cys Glu Cys Pro His Gly Arg Thr Gly Leu
355 360 365

Leu Cys His Leu Asn Asp Ala Cys Ile Ser Asn Pro Cys Asn Glu Gly
370 375 380

Ser Asn Cys Asp Thr Asn Pro Val Asn Gly Lys Ala Ile Cys Thr Cys
385 390 395 400

Pro Ser Gly Tyr Thr Gly Pro Ala Cys Ser Gln Asp Val Asp Glu Cys
405 410 415

Ser Leu Gly Ala Asn Pro Cys Glu His Ala Gly Lys Cys Ile Asn Thr
420 425 430

Leu Gly Ser Phe Glu Cys Gln Cys Leu Gln Gly Tyr Thr Gly Pro Arg
435 440 445

Cys Glu Ile Asp Val Asn Glu Cys Val Ser Asn Pro Cys Gln Asn Asp
450 455 460

Ala Thr Cys Leu Asp Gln Ile Gly Glu Phe Gln Cys Met Cys Met Pro
465 470 475 480

Gly Tyr Glu Gly Val His Cys Glu Val Asn Thr Asp Glu Cys Ala Ser
485 490 495

Ser Pro Cys Leu His Asn Gly Arg Cys Leu Asp Lys Ile Asn Glu Phe
500 505 510

Gln Cys Glu Cys Pro Thr Gly Phe Thr Gly His Leu Cys Gln Tyr Asp
515 520 525

Val Asp Glu Cys Ala Ser Thr Pro Cys Lys Asn Gly Ala Lys Cys Leu
530 535 540

Asp Gly Pro Asn Thr Tyr Thr Cys Val Cys Thr Glu Gly Tyr Thr Gly
545 550 555 560

Thr His Cys Glu Val Asp Ile Asp Glu Cys Asp Pro Asp Pro Cys His
565 570 575

Tyr Gly Ser Cys Lys Asp Gly Val Ala Thr Phe Thr Cys Leu Cys Arg
580 585 590

Pro Gly Tyr Thr Gly His His Cys Glu Thr Asn Ile Asn Glu Cys Ser
595 600 605

Ser Gln Pro Cys Arg Leu Arg Gly Thr Cys Gln Asp Pro Asp Asn Ala
610 615 620

Tyr Leu Cys Phe Cys Leu Lys Gly Thr Thr Gly Pro Asn Cys Glu Ile
625 630 635 640

Asn Leu Asp Asp Cys Ala Ser Ser Pro Cys Asp Ser Gly Thr Cys Leu
645 650 655

Asp Lys Ile Asp Gly Tyr Glu Cys Ala Cys Glu Pro Gly Tyr Thr Gly
660 665 670

Ser Met Cys Asn Ser Asn Ile Asp Glu Cys Ala Gly Asn Pro Cys His

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675                               680                               685
Asn Gly Gly Thr Cys Glu Asp Gly Ile Asn Gly Phe Thr Cys Arg Cys
690                               695                               700
Pro Glu Gly Tyr His Asp Pro Thr Cys Leu Ser Glu Val Asn Glu Cys
705                               710                               715
Asn Ser Asn Pro Cys Val His Gly Ala Cys Arg Asp Ser Leu Asn Gly
725                               730                               735
Tyr Lys Cys Asp Cys Asp Pro Gly Trp Ser Gly Thr Asn Cys Asp Ile
740                               745                               750
Asn Asn Asn Glu Cys Glu Ser Asn Pro Cys Val Asn Gly Gly Thr Cys
755                               760                               765
Lys Asp Met Thr Ser Gly Ile Val Cys Thr Cys Arg Glu Gly Phe Ser
770                               775                               780
Gly Pro Asn Cys Gln Thr Asn Ile Asn Glu Cys Ala Ser Asn Pro Cys
785                               790                               795                               800
Leu Asn Lys Gly Thr Cys Ile Asp Asp Val Ala Gly Tyr Lys Cys Asn
805                               810                               815
Cys Leu Leu Pro Tyr Thr Gly Ala Thr Cys Glu Val Val Leu Ala Pro
820                               825                               830
Cys Ala Pro Ser Pro Cys Arg Asn Gly Gly Glu Cys Arg Gln Ser Glu
835                               840                               845
Asp Tyr Glu Ser Phe Ser Cys Val Cys Pro Thr Ala Gly Ala Lys Gly
850                               855                               860
Gln Thr Cys Glu Val Asp Ile Asn Glu Cys Val Leu Ser Pro Cys Arg
865                               870                               875                               880
His Gly Ala Ser Cys Gln Asn Thr His Gly Xaa Tyr Arg Cys His Cys
885                               890                               895
Gln Ala Gly Tyr Ser Gly Arg Asn Cys Glu Thr Asp Ile Asp Asp Cys
900                               905                               910
Arg Pro Asn Pro Cys His Asn Gly Gly Ser Cys Thr Asp Gly Ile Asn
915                               920                               925
Thr Ala Phe Cys Asp Cys Leu Pro Gly Phe Arg Gly Thr Phe Cys Glu
930                               935                               940
Glu Asp Ile Asn Glu Cys Ala Ser Asp Pro Cys Arg Asn Gly Ala Asn
945                               950                               955                               960
Cys Thr Asp Cys Val Asp Ser Tyr Thr Cys Thr Cys Pro Ala Gly Phe
965                               970                               975
Ser Gly Ile His Cys Glu Asn Asn Thr Pro Asp Cys Thr Glu Ser Ser
980                               985                               990
Cys Phe Asn Gly Gly Thr Cys Val Asp Gly Ile Asn Ser Phe Thr Cys
995                               1000                               1005
Leu Cys Pro Pro Gly Phe Thr Gly Ser Tyr Cys Gln His Val Val
1010                               1015                               1020
Asn Glu Cys Asp Ser Arg Pro Cys Leu Leu Gly Gly Thr Cys Gln
1025                               1030                               1035
Asp Gly Arg Gly Leu His Arg Cys Thr Cys Pro Gln Gly Tyr Thr
1040                               1045                               1050

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P11073us seq list.ST25.txt

Gly	Pro	Asn	Cys	Gln	Asn	Leu	Val	His	Trp	Cys	Asp	Ser	Ser	Pro
1055						1060					1065			
Cys	Lys	Asn	Gly	Gly	Lys	Cys	Trp	Gln	Thr	His	Thr	Gln	Tyr	Arg
1070						1075					1080			
Cys	Glu	Cys	Pro	Ser	Gly	Trp	Thr	Gly	Leu	Tyr	Cys	Asp	Val	Pro
1085						1090					1095			
Ser	Val	Ser	Cys	Glu	Val	Ala	Ala	Gln	Arg	Gln	Gly	Val	Asp	Val
1100						1105					1110			
Ala	Arg	Leu	Cys	Gln	His	Gly	Gly	Leu	Cys	Val	Asp	Ala	Gly	Asn
1115						1120					1125			
Thr	His	His	Cys	Arg	Cys	Gln	Ala	Gly	Tyr	Thr	Gly	Ser	Tyr	Cys
1130						1135					1140			
Glu	Asp	Leu	Val	Asp	Glu	Cys	Ser	Pro	Ser	Pro	Cys	Gln	Asn	Gly
1145						1150					1155			
Ala	Thr	Cys	Thr	Asp	Tyr	Leu	Gly	Gly	Tyr	Ser	Cys	Lys	Cys	Val
1160						1165					1170			
Ala	Gly	Tyr	His	Gly	Val	Asn	Cys	Ser	Glu	Glu	Ile	Asp	Glu	Cys
1175						1180					1185			
Leu	Ser	His	Pro	Cys	Gln	Asn	Gly	Gly	Thr	Cys	Leu	Asp	Leu	Pro
1190						1195					1200			
Asn	Thr	Tyr	Lys	Cys	Ser	Cys	Pro	Arg	Gly	Thr	Gln	Gly	Val	His
1205						1210					1215			
Cys	Glu	Ile	Asn	Val	Asp	Asp	Cys	Asn	Pro	Pro	Val	Asp	Pro	Val
1220						1225					1230			
Ser	Arg	Ser	Pro	Lys	Cys	Phe	Asn	Asn	Gly	Thr	Cys	Val	Asp	Gln
1235						1240					1245			
Val	Gly	Gly	Tyr	Ser	Cys	Thr	Cys	Pro	Pro	Gly	Phe	Val	Gly	Glu
1250						1255					1260			
Arg	Cys	Glu	Gly	Asp	Val	Asn	Glu	Cys	Leu	Ser	Asn	Pro	Cys	Asp
1265						1270					1275			
Ala	Arg	Gly	Thr	Gln	Asn	Cys	Val	Gln	Arg	Val	Asn	Asp	Phe	His
1280						1285					1290			
Cys	Glu	Cys	Arg	Ala	Gly	His	Thr	Gly	Arg	Arg	Cys	Glu	Ser	Val
1295						1300					1305			
Ile	Asn	Gly	Cys	Lys	Gly	Lys	Pro	Cys	Lys	Asn	Gly	Gly	Thr	Cys
1310						1315					1320			
Ala	Val	Ala	Ser	Asn	Thr	Ala	Arg	Gly	Phe	Ile	Cys	Lys	Cys	Pro
1325						1330					1335			
Ala	Gly	Phe	Glu	Gly	Ala	Thr	Cys	Glu	Asn	Asp	Ala	Arg	Thr	Cys
1340						1345					1350			
Gly	Ser	Leu	Arg	Cys	Leu	Asn	Gly	Gly	Thr	Cys	Ile	Ser	Gly	Pro
1355						1360					1365			
Arg	Ser	Pro	Thr	Cys	Leu	Cys	Leu	Gly	Pro	Phe	Thr	Gly	Pro	Glu
1370						1375					1380			
Cys	Gln	Phe	Pro	Ala	Ser	Ser	Pro	Cys	Leu	Gly	Gly	Asn	Pro	Cys
1385						1390					1395			

P11073us seq list.ST25.txt

Tyr	Asn	Gln	Gly	Thr	Cys	Glu	Pro	Thr	Ser	Glu	Ser	Pro	Phe	Tyr
1400						1405						1410		
Arg	Cys	Leu	Cys	Pro	Ala	Lys	Phe	Asn	Gly	Leu	Leu	Cys	His	Ile
1415						1420						1425		
Leu	Asp	Tyr	Ser	Phe	Gly	Gly	Gly	Ala	Gly	Arg	Asp	Ile	Pro	Pro
1430						1435						1440		
Pro	Leu	Ile	Glu	Glu	Ala	Cys	Glu	Leu	Pro	Glu	Cys	Gln	Glu	Asp
1445						1450						1455		
Ala	Gly	Asn	Lys	Val	Cys	Ser	Leu	Gln	Cys	Asn	Asn	His	Ala	Cys
1460						1465						1470		
Gly	Trp	Asp	Gly	Gly	Asp	Cys	Ser	Leu	Asn	Phe	Asn	Asp	Pro	Trp
1475						1480						1485		
Lys	Asn	Cys	Thr	Gln	Ser	Leu	Gln	Cys	Trp	Lys	Tyr	Phe	Ser	Asp
1490						1495						1500		
Gly	His	Cys	Asp	Ser	Gln	Cys	Asn	Ser	Ala	Gly	Cys	Leu	Phe	Asp
1505						1510						1515		
Gly	Phe	Asp	Cys	Gln	Arg	Ala	Glu	Gly	Gln	Cys	Asn	Pro	Leu	Tyr
1520						1525						1530		
Asp	Gln	Tyr	Cys	Lys	Asp	His	Phe	Ser	Asp	Gly	His	Cys	Asp	Gln
1535						1540						1545		
Gly	Cys	Asn	Ser	Ala	Glu	Cys	Glu	Trp	Asp	Gly	Leu	Asp	Cys	Ala
1550						1555						1560		
Glu	His	Val	Pro	Glu	Arg	Leu	Ala	Ala	Gly	Thr	Leu	Val	Val	Val
1565						1570						1575		
Val	Leu	Met	Pro	Pro	Glu	Gln	Leu	Arg	Asn	Ser	Ser	Phe	His	Phe
1580						1585						1590		
Leu	Arg	Glu	Leu	Ser	Arg	Val	Leu	His	Thr	Asn	Val	Val	Phe	Lys
1595						1600						1605		
Arg	Asp	Ala	His	Gly	Gln	Gln	Met	Ile	Phe	Pro	Tyr	Tyr	Gly	Arg
1610						1615						1620		
Glu	Glu	Glu	Leu	Arg	Lys	His	Pro	Ile	Lys	Arg	Ala	Ala	Glu	Gly
1625						1630						1635		
Trp	Ala	Ala	Pro	Asp	Ala	Leu	Leu	Gly	Gln	Val	Lys	Ala	Ser	Leu
1640						1645						1650		
Leu	Pro	Gly	Gly	Ser	Glu	Gly	Gly	Arg	Arg	Arg	Arg	Glu	Leu	Asp
1655						1660						1665		
Pro	Met	Asp	Val	Arg	Gly	Ser	Ile	Val	Tyr	Leu	Glu	Ile	Asp	Asn
1670						1675						1680		
Arg	Gln	Cys	Val	Gln	Ala	Ser	Ser	Gln	Cys	Phe	Gln	Ser	Ala	Thr
1685						1690						1695		
Asp	Val	Ala	Ala	Phe	Leu	Gly	Ala	Leu	Ala	Ser	Leu	Gly	Ser	Leu
1700						1705						1710		
Asn	Ile	Pro	Tyr	Lys	Ile	Glu	Ala	Val	Gln	Ser	Glu	Thr	Val	Glu
1715						1720						1725		
Pro	Pro	Pro	Pro	Ala	Gln	Leu	His	Phe	Met	Tyr	Val	Ala	Ala	Ala
1730						1735						1740		
Ala	Phe	Val	Leu	Leu	Phe	Phe	Val	Gly	Cys	Gly	Val	Leu	Leu	Ser

P11073us seq list.ST25.txt

1745		1750		1755
Arg Lys	Arg Arg Arg Gln His	Gly Gln Leu Trp Phe	Pro Glu Gly	
1760		1765	1770	
Phe Lys	Val Ser Glu Ala Ser	Lys Lys Lys Arg Arg	Glu Pro Leu	
1775		1780	1785	
Gly Glu	Asp Ser Val Gly Leu	Lys Pro Leu Lys Asn	Ala Ser Asp	
1790		1795	1800	
Gly Ala	Leu Met Asp Asp Asn	Gln Asn Glu Trp Gly	Asp Glu Asp	
1805		1810	1815	
Leu Glu	Thr Lys Lys Phe Arg	Phe Glu Glu Pro Val	Val Leu Pro	
1820		1825	1830	
Asp Leu	Asp Asp Gln Thr Asp	His Arg Gln Trp Thr	Gln Gln His	
1835		1840	1845	
Leu Asp	Ala Ala Asp Leu Arg	Met Ser Ala Met Ala	Pro Thr Pro	
1850		1855	1860	
Pro Gln	Gly Glu Val Asp Ala	Asp Cys Met Asp Val	Asn Val Arg	
1865		1870	1875	
Gly Pro	Asp Gly Phe Thr Pro	Leu Met Ile Ala Ser	Cys Ser Gly	
1880		1885	1890	
Gly Gly	Leu Glu Thr Gly Asn	Ser Glu Glu Glu Glu	Asp Ala Pro	
1895		1900	1905	
Ala Val	Ile Ser Asp Phe Ile	Tyr Gln Gly Ala Ser	Leu His Asn	
1910		1915	1920	
Gln Thr	Asp Arg Thr Gly Glu	Thr Ala Leu His Leu	Ala Ala Arg	
1925		1930	1935	
Tyr Ser	Arg Ser Asp Ala Ala	Lys Arg Leu Leu Glu	Ala Ser Ala	
1940		1945	1950	
Asp Ala	Asn Ile Gln Asp Asn	Met Gly Arg Thr Pro	Leu His Ala	
1955		1960	1965	
Ala Val	Ser Ala Asp Ala Gln	Gly Val Phe Gln Ile	Leu Ile Arg	
1970		1975	1980	
Asn Arg	Ala Thr Asp Leu Asp	Ala Arg Met His Asp	Gly Thr Thr	
1985		1990	1995	
Pro Leu	Ile Leu Ala Ala Arg	Leu Ala Val Glu Gly	Met Leu Glu	
2000		2005	2010	
Asp Leu	Ile Asn Ser His Ala	Asp Val Asn Ala Val	Asp Asp Leu	
2015		2020	2025	
Gly Lys	Ser Ala Leu His Trp	Ala Ala Ala Val Asn	Asn Val Asp	
2030		2035	2040	
Ala Ala	Val Val Leu Leu Lys	Asn Gly Ala Asn Lys	Asp Met Gln	
2045		2050	2055	
Asn Asn	Arg Glu Glu Thr Pro	Leu Phe Leu Ala Ala	Arg Glu Gly	
2060		2065	2070	
Ser Tyr	Glu Thr Ala Lys Val	Leu Leu Asp His Phe	Ala Asn Arg	
2075		2080	2085	
Asp Ile	Thr Asp His Met Asp	Arg Leu Pro Arg Asp	Ile Ala Gln	
2090		2095	2100	

P11073us seq list.ST25.txt

Glu Arg Met His His Asp Ile Val Arg Leu Leu Asp Glu Tyr Asn	2105	2110	2115
Leu Val Arg Ser Pro Gln Leu His Gly Ala Pro Leu Gly Gly Thr	2120	2125	2130
Pro Thr Leu Ser Pro Pro Leu Cys Ser Pro Asn Gly Tyr Leu Gly	2135	2140	2145
Ser Leu Lys Pro Gly Val Gln Gly Lys Lys Val Arg Lys Pro Ser	2150	2155	2160
Ser Lys Gly Leu Ala Cys Gly Ser Lys Glu Ala Lys Asp Leu Lys	2165	2170	2175
Ala Arg Arg Lys Lys Ser Gln Asp Gly Lys Gly Cys Leu Leu Asp	2180	2185	2190
Ser Ser Gly Met Leu Ser Pro Val Asp Ser Leu Glu Ser Pro His	2195	2200	2205
Gly Tyr Leu Ser Asp Val Ala Ser Pro Pro Leu Leu Pro Ser Pro	2210	2215	2220
Phe Gln Gln Ser Pro Ser Val Pro Leu Asn His Leu Pro Gly Met	2225	2230	2235
Pro Asp Thr His Leu Gly Ile Gly His Leu Asn Val Ala Ala Lys	2240	2245	2250
Pro Glu Met Ala Ala Leu Gly Gly Gly Gly Arg Leu Ala Phe Glu	2255	2260	2265
Thr Gly Pro Pro Arg Leu Ser His Leu Pro Val Ala Ser Gly Thr	2270	2275	2280
Ser Thr Val Leu Gly Ser Ser Ser Gly Gly Ala Leu Asn Phe Thr	2285	2290	2295
Val Gly Gly Ser Thr Ser Leu Asn Gly Gln Cys Glu Trp Leu Ser	2300	2305	2310
Arg Leu Gln Ser Gly Met Val Pro Asn Gln Tyr Asn Pro Leu Arg	2315	2320	2325
Gly Ser Val Ala Pro Gly Pro Leu Ser Thr Gln Ala Pro Ser Leu	2330	2335	2340
Gln His Gly Met Val Gly Pro Leu His Ser Ser Leu Ala Ala Ser	2345	2350	2355
Ala Leu Ser Gln Met Met Ser Tyr Gln Gly Leu Pro Ser Thr Arg	2360	2365	2370
Leu Ala Thr Gln Pro His Leu Val Gln Thr Gln Gln Val Gln Pro	2375	2380	2385
Gln Asn Leu Gln Met Gln Gln Gln Asn Leu Gln Pro Ala Asn Ile	2390	2395	2400
Gln Gln Gln Gln Ser Leu Gln Pro Pro Pro Pro Pro Pro Gln Pro	2405	2410	2415
His Leu Gly Val Ser Ser Ala Ala Ser Gly His Leu Gly Arg Ser	2420	2425	2430
Phe Leu Ser Gly Glu Pro Ser Gln Ala Asp Val Gln Pro Leu Gly	2435	2440	2445

P11073us seq list.ST25.txt

Pro Ser Ser Leu Ala Val His Thr Ile Leu Pro Gln Glu Ser Pro
 2450 2455 2460
 Ala Leu Pro Thr Ser Leu Pro Ser Ser Leu Val Pro Pro Val Thr
 2465 2470 2475
 Ala Ala Gln Phe Leu Thr Pro Pro Ser Gln His Ser Tyr Ser Ser
 2480 2485 2490
 Pro Val Asp Asn Thr Pro Ser His Gln Leu Gln Val Pro Glu His
 2495 2500 2505
 Pro Phe Leu Thr Pro Ser Pro Glu Ser Pro Asp Gln Trp Ser Ser
 2510 2515 2520
 Ser Ser Pro His Ser Asn Val Ser Asp Trp Ser Glu Gly Val Ser
 2525 2530 2535
 Ser Pro Pro Thr Ser Met Gln Ser Gln Ile Ala Arg Ile Pro Glu
 2540 2545 2550
 Ala Phe Lys
 2555

<210> 40
 <211> 2471
 <212> PRT
 <213> Homo sapiens

<400> 40

Met Pro Ala Leu Arg Pro Ala Leu Leu Trp Ala Leu Leu Ala Leu Trp
 1 5 10 15
 Leu Cys Cys Ala Ala Pro Ala His Ala Leu Gln Cys Arg Asp Gly Tyr
 20 25 30
 Glu Pro Cys Val Asn Glu Gly Met Cys Val Thr Tyr His Asn Gly Thr
 35 40 45
 Gly Tyr Cys Lys Cys Pro Glu Gly Phe Leu Gly Glu Tyr Cys Gln His
 50 55 60
 Arg Asp Pro Cys Glu Lys Asn Arg Cys Gln Asn Gly Gly Thr Cys Val
 65 70 75 80
 Ala Gln Ala Met Leu Gly Lys Ala Thr Cys Arg Cys Ala Ser Gly Phe
 85 90 95
 Thr Gly Glu Asp Cys Gln Tyr Ser Thr Ser His Pro Cys Phe Val Ser
 100 105 110
 Arg Pro Cys Leu Asn Gly Gly Thr Cys His Met Leu Ser Arg Asp Thr
 115 120 125
 Tyr Glu Cys Thr Cys Gln Val Gly Phe Thr Gly Lys Glu Cys Gln Trp
 130 135 140
 Thr Asp Ala Cys Leu Ser His Pro Cys Ala Asn Gly Ser Thr Cys Thr
 145 150 155 160
 Thr Val Ala Asn Gln Phe Ser Cys Lys Cys Leu Thr Gly Phe Thr Gly
 165 170 175
 Gln Lys Cys Glu Thr Asp Val Asn Glu Cys Asp Ile Pro Gly His Cys

180

Gln His Gly Gly Thr Cys Leu Asn Leu Pro Gly Ser Tyr Gln Cys Gln
195 200 205

Cys Pro Gln Gly Phe Thr Gly Gln Tyr Cys Asp Ser Leu Tyr Val Pro
210 215 220

Cys Ala Pro Ser Pro Cys Val Asn Gly Gly Thr Cys Arg Gln Thr Gly
225 230 235 240

Asp Phe Thr Phe Glu Cys Asn Cys Leu Pro Gly Phe Glu Gly Ser Thr
245 250 255

Cys Glu Arg Asn Ile Asp Asp Cys Pro Asn His Arg Cys Gln Asn Gly
260 265 270

Gly Val Cys Val Asp Gly Val Asn Thr Tyr Asn Cys Arg Cys Pro Pro
275 280 285

Gln Trp Thr Gly Gln Phe Cys Thr Glu Asp Val Asp Glu Cys Leu Leu
290 295 300

Gln Pro Asn Ala Cys Gln Asn Gly Gly Thr Cys Ala Asn Arg Asn Gly
305 310 315 320

Gly Tyr Gly Cys Val Cys Val Asn Gly Trp Ser Gly Asp Asp Cys Ser
325 330 335

Glu Asn Ile Asp Asp Cys Ala Phe Ala Ser Cys Thr Pro Gly Ser Thr
340 345 350

Cys Ile Asp Arg Val Ala Ser Phe Ser Cys Met Cys Pro Glu Gly Lys
355 360 365

Ala Gly Leu Leu Cys His Leu Asp Asp Ala Cys Ile Ser Asn Pro Cys
370 375 380

His Lys Gly Ala Leu Cys Asp Thr Asn Pro Leu Asn Gly Gln Tyr Ile
385 390 395 400

Cys Thr Cys Pro Gln Gly Tyr Lys Gly Ala Asp Cys Thr Glu Asp Val
405 410 415

Asp Glu Cys Ala Met Ala Asn Ser Asn Pro Cys Glu His Ala Gly Lys
420 425 430

Cys Val Asn Thr Asp Gly Ala Phe His Cys Glu Cys Leu Lys Gly Tyr
435 440 445

Ala Gly Pro Arg Cys Glu Met Asp Ile Asn Glu Cys His Ser Asp Pro
450 455 460

Cys Gln Asn Asp Ala Thr Cys Leu Asp Lys Ile Gly Gly Phe Thr Cys
465 470 475 480

Leu Cys Met Pro Gly Phe Lys Gly Val His Cys Glu Leu Glu Ile Asn
485 490 495

Glu Cys Gln Ser Asn Pro Cys Val Asn Asn Gly Gln Cys Val Asp Lys
500 505 510

Val Asn Arg Phe Gln Cys Leu Cys Pro Pro Gly Phe Thr Gly Pro Val
515 520 525

Cys Gln Ile Asp Ile Asp Asp Cys Ser Ser Thr Pro Cys Leu Asn Gly
530 535 540

Ala Lys Cys Ile Asp His Pro Asn Gly Tyr Glu Cys Gln Cys Ala Thr
545 550 555 560

P11073us seq list.ST25.txt

Gly Phe Thr Gly Val Leu Cys Glu Glu Asn Ile Asp Asn Cys Asp Pro
565 570 575

Asp Pro Cys His His Gly Gln Cys Gln Asp Gly Ile Asp Ser Tyr Thr
580 585 590

Cys Ile Cys Asn Pro Gly Tyr Met Gly Ala Ile Cys Ser Asp Gln Ile
595 600 605

Asp Glu Cys Tyr Ser Ser Pro Cys Leu Asn Asp Gly Arg Cys Ile Asp
610 615 620

Leu Val Asn Gly Tyr Gln Cys Asn Cys Gln Pro Gly Thr Ser Gly Val
625 630 635 640

Asn Cys Glu Ile Asn Phe Asp Asp Cys Ala Ser Asn Pro Cys Ile His
645 650 655

Gly Ile Cys Met Asp Gly Ile Asn Arg Tyr Ser Cys Val Cys Ser Pro
660 665 670

Gly Phe Thr Gly Gln Arg Cys Asn Ile Asp Ile Asp Glu Cys Ala Ser
675 680 685

Asn Pro Cys Arg Lys Gly Ala Thr Cys Ile Asn Gly Val Asn Gly Phe
690 695 700

Arg Cys Ile Cys Pro Glu Gly Pro His His Pro Ser Cys Tyr Ser Gln
705 710 715 720

Val Asn Glu Cys Leu Ser Asn Pro Cys Ile His Gly Asn Cys Thr Gly
725 730 735

Gly Leu Ser Gly Tyr Lys Cys Leu Cys Asp Ala Gly Trp Val Gly Ile
740 745 750

Asn Cys Glu Val Asp Lys Asn Glu Cys Leu Ser Asn Pro Cys Gln Asn
755 760 765

Gly Gly Thr Cys Asp Asn Leu Val Asn Gly Tyr Arg Cys Thr Cys Lys
770 775 780

Lys Gly Phe Lys Gly Tyr Asn Cys Gln Val Asn Ile Asp Glu Cys Ala
785 790 795 800

Ser Asn Pro Cys Leu Asn Gln Gly Thr Cys Phe Asp Asp Ile Ser Gly
805 810 815

Tyr Thr Cys His Cys Val Leu Pro Tyr Thr Gly Lys Asn Cys Gln Thr
820 825 830

Val Leu Ala Pro Cys Ser Pro Asn Pro Cys Glu Asn Ala Ala Val Cys
835 840 845

Lys Glu Ser Pro Asn Phe Glu Ser Tyr Thr Cys Leu Cys Ala Pro Gly
850 855 860

Trp Gln Gly Gln Arg Cys Thr Ile Asp Ile Asp Glu Cys Ile Ser Lys
865 870 875 880

Pro Cys Met Asn His Gly Leu Cys His Asn Thr Gln Gly Ser Tyr Met
885 890 895

Cys Glu Cys Pro Pro Gly Phe Ser Gly Met Asp Cys Glu Glu Asp Ile
900 905 910

Asp Asp Cys Leu Ala Asn Pro Cys Gln Asn Gly Gly Ser Cys Met Asp
915 920 925

P11073us seq list.ST25.txt

Gly Val Asn Thr Phe Ser Cys Leu Cys Leu Pro Gly Phe Thr Gly Asp
930 935 940

Lys Cys Gln Thr Asp Met Asn Glu Cys Leu Ser Glu Pro Cys Lys Asn
945 950 955 960

Gly Gly Thr Cys Ser Asp Tyr Val Asn Ser Tyr Thr Cys Lys Cys Gln
965 970 975

Ala Gly Phe Asp Gly Val His Cys Glu Asn Asn Ile Asn Glu Cys Thr
980 985 990

Glu Ser Ser Cys Phe Asn Gly Gly Thr Cys Val Asp Gly Ile Asn Ser
995 1000 1005

Phe Ser Cys Leu Cys Pro Val Gly Phe Thr Gly Ser Phe Cys Leu
1010 1015 1020

His Glu Ile Asn Glu Cys Ser Ser His Pro Cys Leu Asn Glu Gly
1025 1030 1035

Thr Cys Val Asp Gly Leu Gly Thr Tyr Arg Cys Ser Cys Pro Leu
1040 1045 1050

Gly Tyr Thr Gly Lys Asn Cys Gln Thr Leu Val Asn Leu Cys Ser
1055 1060 1065

Arg Ser Pro Cys Lys Asn Lys Gly Thr Cys Val Gln Lys Lys Ala
1070 1075 1080

Glu Ser Gln Cys Leu Cys Pro Ser Gly Trp Ala Gly Ala Tyr Cys
1085 1090 1095

Asp Val Pro Asn Val Ser Cys Asp Ile Ala Ala Ser Arg Arg Gly
1100 1105 1110

Val Leu Val Glu His Leu Cys Gln His Ser Gly Val Cys Ile Asn
1115 1120 1125

Ala Gly Asn Thr His Tyr Cys Gln Cys Pro Leu Gly Tyr Thr Gly
1130 1135 1140

Ser Tyr Cys Glu Glu Gln Leu Asp Glu Cys Ala Ser Asn Pro Cys
1145 1150 1155

Gln His Gly Ala Thr Cys Ser Asp Phe Ile Gly Gly Tyr Arg Cys
1160 1165 1170

Glu Cys Val Pro Gly Tyr Gln Gly Val Asn Cys Glu Tyr Glu Val
1175 1180 1185

Asp Glu Cys Gln Asn Gln Pro Cys Gln Asn Gly Gly Thr Cys Ile
1190 1195 1200

Asp Leu Val Asn His Phe Lys Cys Ser Cys Pro Pro Gly Thr Arg
1205 1210 1215

Gly Leu Leu Cys Glu Glu Asn Ile Asp Asp Cys Ala Arg Gly Pro
1220 1225 1230

His Cys Leu Asn Gly Gly Gln Cys Met Asp Arg Ile Gly Gly Tyr
1235 1240 1245

Ser Cys Arg Cys Leu Pro Gly Phe Ala Gly Glu Arg Cys Glu Gly
1250 1255 1260

Asp Ile Asn Glu Cys Leu Ser Asn Pro Cys Ser Ser Glu Gly Ser
1265 1270 1275

Leu Asp Cys Ile Gln Leu Thr Asn Asp Tyr Leu Cys Val Cys Arg

P11073us seq list.ST25.txt

1280		1285		1290
Ser Ala Phe Thr Gly Arg His Cys Glu Thr Phe Val Asp Val Cys				
1295		1300		1305
Pro Gln Met Pro Cys Leu Asn Gly Gly Thr Cys Ala Val Ala Ser				
1310		1315		1320
Asn Met Pro Asp Gly Phe Ile Cys Arg Cys Pro Pro Gly Phe Ser				
1325		1330		1335
Gly Ala Arg Cys Gln Ser Ser Cys Gly Gln Val Lys Cys Arg Lys				
1340		1345		1350
Gly Glu Gln Cys Val His Thr Ala Ser Gly Pro Arg Cys Phe Cys				
1355		1360		1365
Pro Ser Pro Arg Asp Cys Glu Ser Gly Cys Ala Ser Ser Pro Cys				
1370		1375		1380
Gln His Gly Gly Ser Cys His Pro Gln Arg Gln Pro Pro Tyr Tyr				
1385		1390		1395
Ser Cys Gln Cys Ala Pro Pro Phe Ser Gly Ser Arg Cys Glu Leu				
1400		1405		1410
Tyr Thr Ala Pro Pro Ser Thr Pro Pro Ala Thr Cys Leu Ser Gln				
1415		1420		1425
Tyr Cys Ala Asp Lys Ala Arg Asp Gly Val Cys Asp Glu Ala Cys				
1430		1435		1440
Asn Ser His Ala Cys Gln Trp Asp Gly Gly Asp Cys Ser Leu Thr				
1445		1450		1455
Met Glu Asn Pro Trp Ala Asn Cys Ser Ser Pro Leu Pro Cys Trp				
1460		1465		1470
Asp Tyr Ile Asn Asn Gln Cys Asp Glu Leu Cys Asn Thr Val Glu				
1475		1480		1485
Cys Leu Phe Asp Asn Phe Glu Cys Gln Gly Asn Ser Lys Thr Cys				
1490		1495		1500
Lys Tyr Asp Lys Tyr Cys Ala Asp His Phe Lys Asp Asn His Cys				
1505		1510		1515
Asn Gln Gly Cys Asn Ser Glu Glu Cys Gly Trp Asp Gly Leu Asp				
1520		1525		1530
Cys Ala Ala Asp Gln Pro Glu Asn Leu Ala Glu Gly Thr Leu Val				
1535		1540		1545
Ile Val Val Leu Met Pro Pro Glu Gln Leu Leu Gln Asp Ala Arg				
1550		1555		1560
Ser Phe Leu Arg Ala Leu Gly Thr Leu Leu His Thr Asn Leu Arg				
1565		1570		1575
Ile Lys Arg Asp Ser Gln Gly Glu Leu Met Val Tyr Pro Tyr Tyr				
1580		1585		1590
Gly Glu Lys Ser Ala Ala Met Lys Lys Gln Arg Met Thr Arg Arg				
1595		1600		1605
Ser Leu Pro Gly Glu Gln Glu Gln Glu Val Ala Gly Ser Lys Val				
1610		1615		1620
Phe Leu Glu Ile Asp Asn Arg Gln Cys Val Gln Asp Ser Asp His				
1625		1630		1635

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Cys	Phe	Lys	Asn	Thr	Asp	Ala	Ala	Ala	Ala	Leu	Leu	Ala	Ser	His
1640						1645					1650			
Ala	Ile	Gln	Gly	Thr	Leu	Ser	Tyr	Pro	Leu	Val	Ser	Val	Val	Ser
1655						1660					1665			
Glu	Ser	Leu	Thr	Pro	Glu	Arg	Thr	Gln	Leu	Leu	Tyr	Leu	Leu	Ala
1670						1675					1680			
Val	Ala	Val	Val	Ile	Ile	Leu	Phe	Ile	Ile	Leu	Leu	Gly	Val	Ile
1685						1690					1695			
Met	Ala	Lys	Arg	Lys	Arg	Lys	His	Gly	Ser	Leu	Trp	Leu	Pro	Glu
1700						1705					1710			
Gly	Phe	Thr	Leu	Arg	Arg	Asp	Ala	Ser	Asn	His	Lys	Arg	Arg	Glu
1715						1720					1725			
Pro	Val	Gly	Gln	Asp	Ala	Val	Gly	Leu	Lys	Asn	Leu	Ser	Val	Gln
1730						1735					1740			
Val	Ser	Glu	Ala	Asn	Leu	Ile	Gly	Thr	Gly	Thr	Ser	Glu	His	Trp
1745						1750					1755			
Val	Asp	Asp	Glu	Gly	Pro	Gln	Pro	Lys	Lys	Val	Lys	Ala	Glu	Asp
1760						1765					1770			
Glu	Ala	Leu	Leu	Ser	Glu	Glu	Asp	Asp	Pro	Ile	Asp	Arg	Arg	Pro
1775						1780					1785			
Trp	Thr	Gln	Gln	His	Leu	Glu	Ala	Ala	Asp	Ile	Arg	Arg	Thr	Pro
1790						1795					1800			
Ser	Leu	Ala	Leu	Thr	Pro	Pro	Gln	Ala	Glu	Gln	Glu	Val	Asp	Val
1805						1810					1815			
Leu	Asp	Val	Asn	Val	Arg	Gly	Pro	Asp	Gly	Cys	Thr	Pro	Leu	Met
1820						1825					1830			
Leu	Ala	Ser	Leu	Arg	Gly	Gly	Ser	Ser	Asp	Leu	Ser	Asp	Glu	Asp
1835						1840					1845			
Glu	Asp	Ala	Glu	Asp	Ser	Ser	Ala	Asn	Ile	Ile	Thr	Asp	Leu	Val
1850						1855					1860			
Tyr	Gln	Gly	Ala	Ser	Leu	Gln	Ala	Gln	Thr	Asp	Arg	Thr	Gly	Glu
1865						1870					1875			
Met	Ala	Leu	His	Leu	Ala	Ala	Arg	Tyr	Ser	Arg	Ala	Asp	Ala	Ala
1880						1885					1890			
Lys	Arg	Leu	Leu	Asp	Ala	Gly	Ala	Asp	Ala	Asn	Ala	Gln	Asp	Asn
1895						1900					1905			
Met	Gly	Arg	Cys	Pro	Leu	His	Ala	Ala	Val	Ala	Ala	Asp	Ala	Gln
1910						1915					1920			
Gly	Val	Phe	Gln	Ile	Leu	Ile	Arg	Asn	Arg	Val	Thr	Asp	Leu	Asp
1925						1930					1935			
Ala	Arg	Met	Asn	Asp	Gly	Thr	Thr	Pro	Leu	Ile	Leu	Ala	Ala	Arg
1940						1945					1950			
Leu	Ala	Val	Glu	Gly	Met	Val	Ala	Glu	Leu	Ile	Asn	Cys	Gln	Ala
1955						1960					1965			
Asp	Val	Asn	Ala	Val	Asp	Asp	His	Gly	Lys	Ser	Ala	Leu	His	Trp
1970						1975					1980			

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Ala Ala	Ala Val	Asn Asn	Val	Glu Ala	Thr Leu	Leu	Leu Leu	Lys
1985			1990			1995		
Asn Gly	Ala Asn	Arg Asp	Met	Gln Asp	Asn Lys	Glu	Glu Thr	Pro
2000			2005			2010		
Leu Phe	Leu Ala	Ala Arg	Glu	Gly Ser	Tyr Glu	Ala	Ala Lys	Ile
2015			2020			2025		
Leu Leu	Asp His	Phe Ala	Asn	Arg Asp	Ile Thr	Asp	His Met	Asp
2030			2035			2040		
Arg Leu	Pro Arg	Asp Val	Ala	Arg Asp	Arg Met	His	His Asp	Ile
2045			2050			2055		
Val Arg	Leu Leu	Asp Glu	Tyr	Asn Val	Thr Pro	Ser	Pro Pro	Gly
2060			2065			2070		
Thr Val	Leu Thr	Ser Ala	Leu	Ser Pro	Val Ile	Cys	Gly Pro	Asn
2075			2080			2085		
Arg Ser	Phe Leu	Ser Leu	Lys	His Thr	Pro Met	Gly	Lys Lys	Ser
2090			2095			2100		
Arg Arg	Pro Ser	Ala Lys	Ser	Thr Met	Pro Thr	Ser	Leu Pro	Asn
2105			2110			2115		
Leu Ala	Lys Glu	Ala Lys	Asp	Ala Lys	Gly Ser	Arg	Arg Lys	Lys
2120			2125			2130		
Ser Leu	Ser Glu	Lys Val	Gln	Leu Ser	Glu Ser	Ser	Val Thr	Leu
2135			2140			2145		
Ser Pro	Val Asp	Ser Leu	Glu	Ser Pro	His Thr	Tyr	Val Ser	Asp
2150			2155			2160		
Thr Thr	Ser Ser	Pro Met	Ile	Thr Ser	Pro Gly	Ile	Leu Gln	Ala
2165			2170			2175		
Ser Pro	Asn Pro	Met Leu	Ala	Thr Ala	Ala Pro	Pro	Ala Pro	Val
2180			2185			2190		
His Ala	Gln His	Ala Leu	Ser	Phe Ser	Asn Leu	His	Glu Met	Gln
2195			2200			2205		
Pro Leu	Ala His	Gly Ala	Ser	Thr Val	Leu Pro	Ser	Val Ser	Gln
2210			2215			2220		
Leu Leu	Ser His	His His	Ile	Val Ser	Pro Gly	Ser	Gly Ser	Ala
2225			2230			2235		
Gly Ser	Leu Ser	Arg Leu	His	Pro Val	Pro Val	Pro	Ala Asp	Trp
2240			2245			2250		
Met Asn	Arg Met	Glu Val	Asn	Glu Thr	Gln Tyr	Asn	Glu Met	Phe
2255			2260			2265		
Gly Met	Val Leu	Ala Pro	Ala	Glu Gly	Thr His	Pro	Gly Ile	Ala
2270			2275			2280		
Pro Gln	Ser Arg	Pro Pro	Glu	Gly Lys	His Ile	Thr	Thr Pro	Arg
2285			2290			2295		
Glu Pro	Leu Pro	Pro Ile	Val	Thr Phe	Gln Leu	Ile	Pro Lys	Gly
2300			2305			2310		
Ser Ile	Ala Gln	Pro Ala	Gly	Ala Pro	Gln Pro	Gln	Ser Thr	Cys
2315			2320			2325		
Pro Pro	Ala Val	Ala Gly	Pro	Leu Pro	Thr Met	Tyr	Gln Ile	Pro

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2330		2335		2340
Glu Met Ala Arg Leu Pro Ser	Val Ala Phe Pro Thr	Ala Met Met		
2345	2350	2355		
Pro Gln Gln Asp Gly Gln Val	Ala Gln Thr Ile Leu	Pro Ala Tyr		
2360	2365	2370		
His Pro Phe Pro Ala Ser Val	Gly Lys Tyr Pro Thr	Pro Pro Ser		
2375	2380	2385		
Gln His Ser Tyr Ala Ser Ser	Asn Ala Ala Glu Arg	Thr Pro Ser		
2390	2395	2400		
His Ser Gly His Leu Gln Gly	Glu His Pro Tyr Leu	Thr Pro Ser		
2405	2410	2415		
Pro Glu Ser Pro Asp Gln Trp	Ser Ser Ser Ser Pro	His Ser Ala		
2420	2425	2430		
Ser Asp Trp Ser Asp Val Thr	Thr Ser Pro Thr Pro	Gly Gly Ala		
2435	2440	2445		
Gly Gly Gly Gln Arg Gly Pro	Gly Thr His Met Ser	Glu Pro Pro		
2450	2455	2460		
His Asn Asn Met Gln Val Tyr	Ala			
2465	2470			